NSD—AR/35.

ADMINISTRATION REPORT

OF THE

INDIAN STORES DEPARTMENT

FOR THE YEAR

1934-35

PUBLISHED BY THE MANAGER OF PUBLICATIONS, DELHI.
PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, SIMLA.
1935

ADMINISTRATION REPORT

OF THE

INDIAN STORES DEPARTMENT

FOR THE YEAR

1934-35

PUBLISHED BY THE MANAGER OF PUBLICATIONS, DELHI
PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, SIMLA
1935

List of Agents from whom Government of India Publications are available.

ENGLAND.

THE HIGH COMMISSIONER FOR INDIA, INDIA HOUSE, ALDWYCH, LONDON, W. C. 2.

PALESTINE.

Steimatzky, Jerusalem.

INDIA.

(a) PROVINCIAL GOVERNMENT BOOK DEPOTS.

MADRAS.—Superintendent, Government Press, Mount Road, Madras.
BOMBAY:—Superintendent, Government Printing and Stationery, Queen's Road, Bombay.
SIND:—Library attached to the Office of the Commissioner in Sind, Karachi.
UNITED PROVINCES OF AGRA AND OUDH:—Superintendent of Government Press, United Provinces of Agra and Oudh, Allahabad.
PUNJAB:—Superintendent, Government Printing, Punjab, Lahore.
BURMA:—Superintendent, Government Printing, Burma, Rangoon.
CENTRAL PROVINCES AND BERAR:—Superintendent, Government Printing, Central Provinces, Nagpur.
ASSAM:—Superintendent, Assam Secretariat Press, Shillong.
BIHAR AND ORISSA:—Superintendent, Government Printing, Bihar and Orissa, P. O. Gulzarbagh, Patna.
NORTH-WEST FRONTIER PROVINCE:—Manager, Government Printing and Stationery, Peshawar.

(b) PRIVATE BOOK-SELLERS.

Advani Bros., Cawnpore.
Aero Stores, Karachi City.*
Albert Library, Dacca.
Banerjee & Bros., Ranchi, Messrs. G.
Banthiya & Co., Ltd., Kucheri Road Ajmer.
Bengal Flying Club, Dum Dum Cantt.*
Bhawnani & Sons, New Delhi.
Book Company, Calcutta.
Book Lover's Resort, Taikad, Trivandrum, South India.
Burma Book Club, Ltd., Rangoon.
Butterworth & Co. (India), Ltd., Calcutta.
Calcutta Book Agency, 16-1, Shama Charan Dey Street, Calcutta.
Chatterjee & Co., 3, Bacharam Chatterjee Lane, Calcutta.
Chukervertty, Chatterjee & Co., Ltd., 13, College Square, Calcutta.
City Book Co., Madras.
City Book House, Meston Road, Cawnpore.
Commercial Book Co., Lahore.
Das Gupta & Co., 54/3, College Street, Calcutta.
Deccan Book Stall, Poona 4.
Delhi and U. P. Flying Club, Ltd., Delhi.*
English Book Depot, Ferozepore.
English Book Depot, Taj Road, Agra, and Saddar Bazar, Jhansi.
English Book Depot, Bank Road, Ambala Cantt., Kasauli.
English Bookstall, Karachi.
Fakir Chand Marwah, Peshawar Cantt.
Fono Book Agency, Simla.
Gaya Prasad & Sons, Agra.
Grantha Mandir, Cuttack.
Higginbothams, Madras.
Hindu Library, 137/F., Balaram De Street, Calcutta.
Hyderabad Book Depot, Chaderghat, Hyderabad (Deccan).
Imperial Book Depot and Press, near Jama Masjid (Machhliwalan), Delhi.
Indian Army Book Depot, Dayalbagh, Agra.
Indian Army Book Depot, Jullundur City and Daryaganj, Delhi.
Indian Book Shop, Benares City.
Indian School Supply Depot, 309, Bow Bazar St., Calcutta.
Insurance Publicity Co., Ltd., Lahore.
International Book Service, Poona 4.
Jaina & Bros., Mori Gate, Delhi, Messrs. J. M.
James Murray & Co., 12, Govt. Place, Calcutta (for Meteorological publications only).
Kali Charan & Co., Municipal Market, Calcutta.
Kamala Book Depot, 15, College Square, Calcutta.
Kamala Book Stores, Bankipore, Patna.
Karnataka Publishing House, Bangalore City.
Keale & Co., Karachi.
Krishnaswami & Co., Teppakulam P. O., Trichinopoly Fort, Messrs. S.
Lahiri & Co., Calcutta, Messrs. S. K.
Law Printing House, 11, Mount Road, Madras.
Law Publishing Co., Mylapore, Madras.
Lawrence and Mayo, Ltd., Bombay (for Meteorological publications only).
Local Self-Govt. Institute, Bombay.
London Book Co. (India), Arbab Road, Peshawar, Murree, Nowshera, Rawalpindi.
London Book Depot, B. I. Bazar, Bareilly, U. P.
Malhotra & Co., Quetta, Messrs. U. P.
Mohanlal Dossabhai Shah, Rajkot.
Nond Kishore & Bros Chowk, Benares City.
Nateson & Co., Publishers, George Town, Madras, Messrs. G. A.
New Book Co., "Kitab Mahal", 192, Hornby Road, Bombay.
Newman & Co., Ltd., Calcutta, Messrs. W.
North India Christian Tract and Book Society, 18, Clive Road, Allahabad.
Oriental Book Supplying Agency, 15, Shukrawar, Poona City.
Oxford Book and Stationery Company, Delhi, Lahore, Simla, Meerut and Calcutta.
Parikh & Co., Baroda, Messrs. B.
Pioneer Book Supply Co., 20, Shib Narayan Das Lane, Calcutta, and 219, Cloth Market, Delhi.
Popular Book Depot, Grant Road, Bombay.
Punjab Religious Book Society, Lahore.
Punjab Sanskrit Book Depot, Saidmitha Street, Lahore.
Raghunath Prasad & Sons, Patna City.
Rama Krishna & Sons, Booksellers, Anarkali, Lahore.
Ram Krishna Bros., Opposite Bishrambag, Poona City.
Ram Narain Lal, Katra, Allahabad.
Ramesh Book Depot, Stationery Mart, Kashmere Gate, Delhi.
Ray & Sons, 43, K. & L. Edwardes Road, Rawalpindi, Murree and Peshawar, Messrs. J.
Ray Chowdhury & Co., 68/5, Ashutosh Mukherjee Road, Calcutta.
Rochouse & Sons, Madras.
Roy Chowdhury & Co., 11, College Square, Calcutta, Messrs. N. M.
Sampson William & Co., 127-B., The Mall, Cawnpore.
Sarcar & Sons, 15, College Square, Calcutta, Messrs. M. C.
Sarkar & Co., Ltd., 18 Shama Charan De Street, and 8/2 Hastings Street, Calcutta, Messrs. P.C.
Scientific Publishing Co., 9, Taltola Lane, Calcutta.
Seshachalam & Co., Masulipatam, Messrs. M.
Shivji & Co., P. O. Chauliaganj, Cuttack.
Shri Shankar Karnataka Pustaka Bhandara, Malamuddi, Dharwar.
S. P. Bookstall, 21, Budhwar, Poona.
Standard Bookstall, Karachi.
Standard Book Depot, Lahore, Dalhousie and Delhi.
Standard Law Book Society, 5, Hastings Street, Calcutta.
Standard Literature Company, Ltd., Calcutta.
Students' Popular Depot, Kacheri Rd., Lahore.
Surat and District Trading Society, Surat.
Taraporevala Sons & Co., Bombay, Messrs. D. B.
Thacker & Co., Ltd., Bombay.
Thacker, Spink & Co., Ltd., Calcutta.
Tripathi & Co., Booksellers, Princess Street, Kalbadevi, Road, Bombay, Messrs. N. M.
Union Stores, Indore City.
University Book Agency, Kachari Road, Lahore.
Upper India Publishing House, Ltd., Literature Palace, Ammuddaula Park, Lucknow.
Varadachary & Co., Madras, Messrs. P.
Wheeler & Co Allahabad, Calcutta and Bombay Messrs A. H.
Young Man & Co., Ajmer and Egerton Road Delhi

* Agent for publications on Aviation only.

TABLE OF CONTENTS.

Illustrations.



The Nerbudda Bridge Span No. 16.

(*Vide* paragraph 45.)

ADMINISTRATION REPORT OF THE INDIAN STORES DEPARTMENT FOR THE YEAR 1934-35.

CHAPTER I.

SUMMARY.

General.—The Report of the Indian Stores Department for the year 1933-34 recorded improvement in the activities of the Department after two years of world-wide financial depression. The operations of the year 1934-35 show a further and more marked improvement in every direction. The turnover of the Purchase Branch exceeded the previous highest record, which was attained in the year 1929-30, by Rs. 47,10,550. The number of tests and analyses carried out at the Government Test House and the Metallurgical Inspectorate exceeded the previous highest record, which was reached in the year 1930-31, by 341 tests. The work of the Inspection Branch, though still below the pre-retrenchment level, also showed considerable improvement.

2. *Activities of the Purchase Branch of the Department.*—The number of orders placed during the year increased from 49,767 to 61,803 and their value from Rs. 3,59,94,135 to Rs. 4,76,36,251. Full details of the work of the Purchase Branch will be found in Chapter III and Appendices V to XI and XIX.

3. *Activities of the Inspection Branch.*—The value of stores inspected during the year increased from Rs. 4,46,65,505 to Rs. 5,36,35,655 ; and the tonnage of stores charged on weight from 254,833 to 323,862. The number of tests and analyses carried out at the laboratories of the Government Test House, Alipore, and the Metallurgical Inspectorate, Jamshedpur, amounted to 16,597 as compared with 15,499 during the preceding year. Full details of the work of the Inspection Branch will be found in Chapters IV, V and VI and in Appendices XII to XVII and XIX.

4. *The operation of the Rupee Tender System.*—During the year the Government of the United Provinces revised their rules for the purchase of stores which are now in line with the Rupee Tender System.

5. *Indents on India Store Department, London, and firms abroad.*—Copies of 1,257 indents of the estimated value of Rs. 93,32,272 placed by the various Provincial Governments and Central Departments on the Director General, India Store Department, London, or direct on firms abroad, were received for examination during the year as against 1,180 indents of the estimated value of Rs. 60,01,840 during the year 1,933-34. The increase in the number and value of indents placed abroad was mainly due to demands for stores and equipment for the Royal Air Force, which cannot be obtained in India in accordance with the Rules, as they have to satisfy the standards prescribed by the Air Ministry and have to be inspected by the Aeronautical Inspection Department in England before shipment.

Demands of the estimated value of Rs. 74,640 were challenged during the year as against Rs. 80,333 during the previous year.

The following statement shows the results of the examination of indents during the years 1931-32 to 1934-35.

Year.	No. of indents examined.	Value of indents examined.	Value of items challenged.	Percentage of the value of the items challenged to total value of indents.
		Rs.	Rs.	
1931-32	915	93,84,301	3,94,293	4·2
1932-33	835	74,36,880	63,573	.85
1933-34	1,180	60,01,840	80,333	1·33
1934-35	1,257	93,32,272	74,640	·79

In accordance with the arrangement referred to in paragraph 6 of the Report for the year 1933-34, half-yearly lists of stores obtained from abroad were published in the Indian Trade Journal.

6. *Utilisation of the services of the Indian Stores Department by authorities outside India.*—As in past years, the services of the Department were utilised by the Resident Engineer, Royal Airship Base, Karachi, for the purchase and inspection of miscellaneous stores and by the Inspector General of Police, Singapore, Straits Settlements, for Police uniforms and accoutrements. The value of orders placed on behalf of these authorities aggregated Rs. 11,581. A supply of oil, diesel, of the value of Rs. 3,143 was also made to the Colonial Store Keeper, Ceylon.

Tents of the value of Rs. 3,814, manufactured at Cawnpore, were inspected on behalf of the Palestine Government and cast iron pipes and specials aggregating 517 tons, manufactured at Kulti, were inspected on behalf of the Singapore Municipality.

7. *Financial position.*—The financial result of the working of the Department for the year is exhibited in the statement of accounts prepared by the Audit Officer, Indian Stores Department, which appears as Appendix XVIII. The account shows separately the expenditure on the commercial and non-commercial activities of the Department. The net result of the year's operations shows an improvement of Rs. 2,12,964 and Rs. 19,241 respectively, in the commercial and non-commercial sections of the Department's activities, as compared with the preceding year.

A complete statement of work done and fees earned by the Department, year by year, since its constitution, will be found in Appendix XIX.

8. *Organisation of the Indian Stores Department and procedure in force.*—A brief description of the organisation of the Department, with hints for the guidance of indenting authorities, will be found in Appendix I to this Report. Full details are given in a pamphlet copies of which can be obtained, free of charge, on application to the Chief Controller of Stores.

CHAPTER II.

ORGANISATION.

9. *Changes in organisation.*—The most important change in the organisation of the Department was the formation of the Industrial Intelligence and Research Bureau, a description of which will be found in Chapter VII.

The designation of the Head of the Bombay Inspection Circle was changed from Assistant Controller to Controller. An appointment of Personal Assistant to the Controller of Inspection, Bombay Inspection Circle, was also created, in order to assist the Controller in the disposal of administrative and non-technical work.

Increase in the volume of work handled by the Department necessitated the revival of a number of non-gazetted posts which had been held in abeyance as a measure of retrenchment. Two posts of Chemical Assistant and two posts of Examiner of Stores were thus revived.

10. *Organisation at the end of the year.*—There were 754 sanctioned posts in the Department at the end of the year under review classified as below :—

Gazetted Officers	65
Technical subordinates including Drawing Office Staff ..	99
Ministerial Staff	380
Inferior servants	210
Total ..	754

A conspectus of the organisation as it stood on the 31st March 1935 will be found in Appendix II.

11. *Important changes in personnel.*—Mr. N. Brodie, Superintendent, Government Test House, Alipore, was appointed as Director of the newly created Industrial Intelligence and Research Bureau, and assumed charge of this appointment on his return from leave in November 1934. Mr. E. F. G. Gilmore continued in the appointment of Superintendent, Government Test House, Alipore.

12. *Number of European and Indian officers in the Department.*—Appendix III of the Report contains a graph shewing the progress of Indianization and the proportion of Indians and non-Indians in the gazetted ranks from year to year, since the constitution of the Department in 1922. During the year under review, one European and one Indian officer left the Department, and four Indian officers were recruited. The number of European and Indian officers on the 31st March 1935 thus stood at 22 and 41 respectively as against 23 and 38 on the same date in the previous year.

13. *Recruitment in the subordinate technical staff.*—As in previous years all vacancies were filled by Indians.

14. *Communal composition of the staff.*—The orders of the Government of India about securing adequate representation of the various communities in the staff of the Department were carefully observed. Appendix IV

shows the communal composition of the staff on the 31st December 1934 as compared with the composition on the corresponding date of the previous year.

15. *Facilities to officers for visiting works abroad.*—Facilities for visiting leading manufacturing firms abroad during their leave were granted to Mr. R. W. Targett, Deputy Director of Purchase, Headquarters, Major F. Carlton Scott, Controller of Inspection, Bombay, and Mr. Neale, an Examiner of stores. Mr. P. K. Sen, Assistant Chemist, Government Test House, Alipore, was afforded facilities while on leave in England to acquire experience in the operation of plant and equipment for testing the anti-knock values of fuels for internal combustion engines.

———

CHAPTER III.

WORK OF THE PURCHASE BRANCH.

16. *General.*—The total value of purchases made by the Department during the year amounted to Rs. 4,76,36,251 as compared with Rs. 3,59,94,135 during 1933-34. There was thus an increase of Rs. 1,16,42,116 or 32·3%. This result can be regarded very satisfactory having regard to the fact that the emergence from the preceding depression was slow and hesitant and expenditure on large capital works continued to be restricted.

A marked increase has also to be recorded in the volume of purchase work carried out during the year as the following statement shows.

Year.	No. of indents received.	No. of items on indents received.	No. of orders placed.
1934-35	55,024	1,06,996	61,803
1933-34	44,133	88,347	49,767
1932-33	38,720	77,288	44,045

The table below gives an analysis of the above figures showing the distribution of the work throughout the various purchase organisations of the Department:—

Organization.	No. of indents received.			No. of items in indents received.			No. of orders placed.		
	1932-33	1933-34	1934-35	1932-33	1933-34	1934-35	1932-33	1933-34	1934-35
Provincial.									
Controller of Purchase, Calcutta.	7,179	6,900	8,696	20,233	19,301	23,389	9,458	9,353	11,608
Controller of Purchase, Bombay.	3,468	2,611	3,158	10,263	8,625	9,738	5,933	4,295	4,830
Controller of Purchase, Karachi.	1,717	2,185	3,509	5,636	8,392	12,995	3,081	4,245	6,605
Total Provincial	12,364	11,696	15,363	36,132	36,318	46,122	18,472	17,893	23,043
Total Headquarters	26,356	32,437	39,661	41,156	52,029	60,874	25,573	31,874	38,760
Grand Total ..	38,720	44,133	55,024	77,288	88,347	1,06,996	44,045	49,767	61,803

Details of the values of orders placed are given in Appendices V to VIII.

17. *Clientèle of the Department.*—During the year 1934-35 there were further additions to the list of indentors who utilised the services of the Department for the first time, and although the value of business brought to the Department by these new indentors was comparatively small, it is interesting to observe that the Department's clientèle continues to expand.

18. *Variations in demands.*—The following statement shows the fluctuations in the values of orders placed on behalf of various indenting authorities, as compared with the corresponding figures of the preceding year.

Indenting authorities.	Value of orders during		Increase + Decrease —.	Percentage Increase + Decrease —.
	1933-34.	1934-35.		
Central—Army	82,48,014	86,06,705	+3,58,691	+4%
Central—Civil	29,67,467	56,96,890	+27,29,423	+92%
Railways, State-worked ..	1,70,92,917	2,53,50,592	+82,57,675	+48%
Railways, Company-worked	3,81,077	6,15,345	+2,34,268	+61%
Railways, worked by Indian States	1,31,714	5,31,899	+4,00,185	+304%
Total Railways ..	1,76,05,708	2,64,97,836	+88,92,128	+51%
Provincial Governments ..	59,39,207	52,17,782	—7,21,425	—12%
Indian States	2,74,414	4,35,317	+1,60,903	+59%
Quasi-public bodies	9,47,537	11,66,997	+2,19,460	+23%
British Government and Colonies	11,788	14,724	+2,936	+25%
Grand Total	3,59,94,135	4,76,36,251	+1,16,42,116	+32%

It is of interest to observe that there was a very substantial increase in the value of purchases made on behalf of *quasi*-public bodies. This increase is particularly gratifying as these bodies are in no way compelled by official orders to utilise the services of the Department but do so entirely voluntarily. The following table shows the volume of business undertaken for *quasi*-public bodies during the past six years.

Year.	Rs.
1929-30	1,53,194
1930-31	1,24,269
1931-32	2,18,627
1932-33	3,61,420
1933-34	9,47,537
1934-35	11,66,997

19. *Purchases on behalf of the Military Department.*—Purchases made on behalf of the Army during the year amounted to Rs. 86,06,705 against the previous year's total of Rs. 82,48,014 an increase of Rs. 3,58,691, or 4%.

The value of Textile stores purchased for Army indentors increased by Rs. 6,56,970 but the value of engineering stores purchased was less than the previous year by Rs. 2,98,279. Purchases for the Military Engineer Services declined in value by Rs. 3,75,302. Those made on behalf of the Quartermaster General including Mechanical transport equipment show a slight increase in value by Rs. 18,760. Purchases made for the Master General of Ordnance show an increase of Rs. 4,57,852, while those for the Royal Indian Navy, the Royal Air Force and other miscellaneous military indentors similarly increased in value by Rs. 2,57,381.

20. *Purchases on behalf of Civil Departments of the Central Government.*—The value of purchases made for the Central Government was almost double that of the previous year. There was an increase of Rs. 27,29,423 or 92%. This satisfactory increase is attributable chiefly to the larger value of stores purchased on behalf of the Posts and Telegraphs Department, Central Public Works Department and the Andaman Commission, but increases were general under this heading.

21. *Purchases on behalf of Railway Administrations.*—Meetings with the Railway Department (Railway Board) were continued throughout the year and as a result the following stores were added to the list of requirements of State Railway administrations, the purchase and inspection of which will be entrusted for the future to the Indian Stores Department :—

1. I. R. S. track fittings (excluding rails, fish-plates, wood and metal sleepers complete), *i.e.*, fishbolts, dog spikes, bearing plates and metal sleeper components (where the latter are required separately and do not form part of an order for complete sleepers).
2. All points and crossings manufactured from British Standard Flat footed rails.
3. All I. R. S. component parts of underframes.
4. All I. R. S. component parts of wagons.
5. I. R. S. Plate Girder Spans.
6. Weighing machines and weigh-bridges.
7. Pumping plant of all types including tube well pumps and spare parts.
8. Forges, portable.
9. Vices, stand and hand.
10. Jacks.
11. Wheels and axles.
12. Pinions and spur wheels for electric multiple unit motor coaches.
13. Interior carriage ceiling boards, *e.g.*, mill boarding, sundeala, lincrusta and like materials.
14. Metal, expanded.
15. All brass and gunmetal water-fittings such as, bibcocks, stop-cocks, etc.
16. Glass.

17. Crockery.
18. Cutlery.
19. Jointing material.
20. Emery cloth.
21. Glass paper.
22. Locomotive headlight equipment complete, including turbo-generators and components.
23. Ebonite rods and sheets and substitutes.
24. Machine tools of all kinds and accessories not already included in the list. Hand and steam cranes of all kinds with the exception of break-down cranes and steam break-down cranes approved and sanctioned by the Railway Board under the Rolling Stock Programmes for 1936-37.
25. Special rails not included in the Railway Board's contract with Messrs. the Tata Iron and Steel Co.
26. Rail anchors.
27. Diesel engine locomotives and rail cars.
28. Wheels and wheel centres for carriages and wagons.
29. All standardized signalling and interlocking fittings.
30. Pig lead.

The value of purchases made for Railway administrations as a whole amounted to Rs. 2,64,97,836, against Rs. 1,76,05,708 in 1933-34, *i.e.*, an increase of Rs. 88,92,128 or 51%. Of this increase Rs. 82,57,675 represents the enhanced value of stores purchased for State Railways and Rs. 6,34,453 the increase in the value of orders from the Railways worked by Companies and Indian States.

This substantial addition to the turnover of the Department gives great cause for satisfaction and represents the increasing support extended to it by the Railway Department.

22. *Purchases on behalf of Major local Governments.*—There was a decline in the value of stores purchased for major local Governments. During 1933-34 the total value under this heading was Rs. 59,39,207 while during the year under review the figure was Rs. 52,17,782, *i.e.*, a decrease of Rs. 7,21,425 or 12%. The purchases made on behalf of the Punjab Government were less in value by Rs. 10·5 lakhs but those made for Madras, Bombay, Central Provinces, and North-West Frontier Province showed an increase of Rs. 5·15 lakhs.

23. *Effect of price levels on the turnover of the Department.*—A statement illustrative of the effect of the drop in prices on the turn-over of the Department was published in the Administration Report for 1933-34. The following list comprises some of the items of stores which showed a further drop in price levels during the year under review. With the exception of a few textile items such as flannel, silver grey, and paulins, flax, and a few engineering

items which showed an increase in price, the general price level shows a drop in respect of various articles as compared with the year 1933-34.

Name of article.	Average percentage drop as compared with 1933-34 prices.
Textiles.	
Serge, blue, medium	11·47%
Postal bags, jute canvas	5·32%
Drill, blue, medium	5·26%
Drill, Khaki	3·61%
Engineering and Miscellaneous.	
Varnish, Gold size	20·59%
Asbestos cement sheets, Corrugated	18·75%
Oil, castor	15·7 %
Oil, linseed, double boiled	13·27%
Asbestos cement sheets, flat, grey	11·67%
Paint red lead, dry	11·67%
Oil, mineral, cleaning	10·88%
Electrodes	10·00%
Black Japan	9·52%
Piston rod, brass, covered to V. B. 54	9·21%
Copper wires, silk and cotton covered	7·00%
Oil, kerosene	6·66%
Creosote	6·00%
Insulators	6·00%
Roofing 2 ply in rolls	5·00%
Galvanised Iron Wire	5·00%
Piston rod, brass, covered to V. B. 31	4·95%
Meters, electric, house service	4·00%
Oil, linseed, raw	3·41%
Fans, electric	3·00%
Cables, V. I. R. and Insulated	3·00%

Name of article.	Average percentage increase as compared with 1933-34 prices.
Textiles.	
Flannel, silver grey	33·33%
Paulins, flax	21·67%
Drill, bleached	4·50%
Engineering and Miscellaneous.	
Boiler and flue tubes	17·58%
Wheels and axles	14·00%
Steel poles	10·00%
Varnish, body, best, hard drying, inside	9·68%
Inert cells	8·00%
Copper conductors	7·00%
Varnish, body, finishing	6·25%
Gland packing ring	5·00%
Mild Steel Pipes	5·00%
Paint, white lead, stiff	4·17%

24. *Purchase of Textile and Leather goods.*—The total value of purchases made during the year of the above stores was Rs. 95,85,357 as compared with Rs. 85,55,361 during 1933-34 *i.e.*, an increase of Rs. 10,29,996 or 12%. The purchases comprised :—

Items.	1933-34.	1934-35.
Cotton goods	43,42,079	40,91,616
Woollen goods	32,61,044	33,88,853
Jute, flax, etc.	8,19,761	19,00,003
Leather goods	1,32,477	2,04,885
Total	85,55,361	95,85,357

The value of Army purchases was Rs. 53,15,875 as compared with Rs. 46,58,905 for the previous year. The increase of Rs. 6,56,970 was due to the placing of large contracts for ground sheets, web equipment and great coat cloth.

Purchase for Railways amounted to Rs. 25,59,119 as against Rs. 20,46,643 during 1933-34. The increase is due to a larger expenditure on clothing for the Railway staff. There was an increase of Rs. 40,044, in the value of textile stores purchased for the Central Public Works Department, this being due to the purchase of a quantity of carpets and durries required for the furnishing of new residential quarters constructed at New Delhi during the year. The value of textile and leather goods purchased for major Local Governments amounted to Rs. 9,07,827 as compared with Rs. 10,15,090 in 1933-34. Notable variations are that purchases for Bombay and Madras increased by Rs. 12,711 and Rs. 42,595 respectively whereas purchase for Burma declined in value by Rs. 1,20,845.

The percentage value of indigenous textile and leather stores purchased was 83·5% and that of imported stores 16·5% as compared with 79·3% and 20·7% during the previous year. It should be realised however that a larger proportion of the imported stores are not at present being manufactured in India.

25. *Purchase of Engineering, Hardware and Miscellaneous stores.*—The total value of these stores purchased during the year was Rs. 3,80,50,894. For the preceding year the figure was Rs. 2,74,38,774, an increase of Rs. 1,06,12,120 or 38·6%.

The following table shows the distribution of this group of purchases among the various indentors utilising the services of the Department:—

—	1933-34.	1934-35.	Difference.
Central, Army	35,89,109	32,90,830	—2,98,279
Central, Civil	21,42,557	49,26,811	+27,84,254
State Railways	1,50,77,087	2,28,53,921	+77,76,834
Company Railways	3,71,309	5,69,796	+1,98,487
Railways worked by Indian States ..	1,10,669	5,15,000	+4,04,331
Provincial Governments	49,24,117	43,09,955	—6,14,162
Indian States	2,74,206	4,27,733	+1,53,527
Quasi-Public Bodies	9,45,161	11,52,768	+2,07,607
British and Colonial Governments ..	4,559	4,080	—479
Total	2,74,38,774	3,80,50,894	+1,06,12,120

It will be seen that the very considerable increase in the value of engineering stores purchased for Railways, Central Civil Departments and *quasi*-public bodies more than offset the decline in value of stores purchased for the Army and Provincial Governments.

One of the important purchases made by the Engineering Branch during the year under review was that of a single screw steam tug, of the following description, for the Vizagapatam Harbour :—

Langth overall	62′—0″
Beam	17′—0″
Draft	11′—0″maximum.
Horse Power	450′
Maximum speed	10 knots.
Total value of the contract	Rs. 99,930

The vessel was built in India.

The total value of important items of engineering and miscellaneous stores wholly or partly manufactured in India, for which contracts were placed during the year, amounted to over Rs. 1,36,05,000 (as against Rs. 1,10,13,000 during the previous year) representing about 36% of the total engineering purchases made. Details of these purchases will be found in paragraph 69. The steady increase in the value of engineering stores manufactured in India which this Department has been able to order is an indication of the growing ability of the engineering industry in India to supply the requirements of the State.

26. *Distribution of purchases.*—The statistics given in Appendix VIII show the distribution of the orders placed by the Department among the different provinces and other territories during the year under review, and the three preceding years. It will be observed that the system followed by the Department in making purchases continues to ensure that orders are widely distributed throughout the country.

27. *Details of important purchases.*—The more important purchases made during the year were :—

Textile and Leather stores.

	Amount. Rs.
Drills	9,53,000
Cotton waste	6,57,000
Blankets, woollen	6,53,000
Sheets, ground	5,92,000
Flannel	4,94,000
Jackets, Cardigan, Jerseys woollen, banians, etc.	4,75,000
Pugree cloths, khaki, coloured, white, muslin, calico, etc.	4,65,000
Tent and tent components	3,51,000
Serges	3,34,000
Cloth, drab mixture and Greatcoat cloth	3,24,000
Socks and stockings	3,15,000
Web equipment and components	2,61,000
Putties, cotton and woollen	1,94,000
Rugs, Horse	1,85,000
Paulins, flax and jute	1,50,000
Canvas, flax, cotton, hemp, etc.	1,43,000
Nets and Netting, Mosquito	1,41,000
Sheets, Barrack and Hospital	1,37,000
Wool cotton, absorbent	1,36,000
Durries, cotton	1,36,000
Leather cloth, binding furniture, linoleum, etc.	1,25,000
Bags, postal, jute, flax, leather, etc.	1,04,000
Thread, sewing and twine	1,03,000
Twill, cotton	99,000
Yarn, cotton and woollen	96,000
Drawers, cotton and woollen	91,000
Hessians and gunnies	91,000
Boots and shoes	89,000
Ropes, head and heel, and Ropes, picketting	88,000
Garments, uniform	87,000
Capes and Coats, Waterproof	82,000

		Amount.
		Rs.
Cord, cotton	..	77,000
Dhoti cloth, Dosuti cloth, long cloth and cloth silicia	..	75,000
Blanketing cloth	..	71,000
Tape and Webbing	..	61,000
Greatcoats, Overcoats and Coats blanket	..	60,000
Flannelette	..	60,000

Engineering and allied stores.

Wheels, axles, tyres and axle boxes for Railway wagons and Locomotives	..	51,15,000
Paints, Enamels and Varnishes, including dry pigments	..	19,09,000
Mild Steel Sections and sheets	..	18,46,000
Cement	..	17,12,000
Road making materials (Tars bitumens and emulsions)	..	16,65,000
Oil, Kerosene	..	15,29,000
Oils, lubricating	..	11,24,000
Copper wires	..	11,20,000
Oil, Axle	..	10,89,000
Fans, electric, ceiling, table and railway carriage	..	10,61,000
Cables, insulated wires, Joint boxes and flexible cords	..	9,88,000
Electric Generating plants	..	9,19,000
Oil, Fuel	..	8,77,000
Lamps, electric	..	8,33,000
Track fittings, *i.e.*, sleepers, bolts, nuts, dogspikes, crossings, etc.		7,72,000
Component parts of coaching underframes	..	7,67,000
Train lighting equipment	..	6,62,000
Cells, electric, and components	..	4,34,000
Vaccum Brake fittings	..	4,32,000
Pig iron	..	4,30,000
Pipes and fittings, M. S. galvanized	..	3,68,000
Miscellaneous mechanical plant and spare parts of machinery	..	3,38,000
Covers and tubes, rubber, for motor vehicles	..	3,37,000
Insulators, porcelain	..	3,35,000
Boilers and boiler plant	..	3,18,000
Motor Vehicles and spares	..	3,11,000
Oil, Castor	..	3,10,000
Electric distribution and transmission line materials	..	3,02,000
Mild steel sheets, galvanised and plain	..	2,95,000
Petrol	..	2,88,000
Pipes and specials, cast iron	..	2,83,000
Pumping plants	..	2,65,000
Switchgear, transformers and motors, electric	..	2,55,000
Wire, steel, galvanized	..	2,54,000
Workshop machinery	..	2,45,000
Boiler and superheater flue tubes	..	2,23,000
Sea-going and river craft	..	2,16,000

	Amount.
	Rs.
Greases	2,15,000
Coal, steam and rubble	2,12,000
Permanent way materials	2,00,000
Poles, steel, tubular	1,89,000
Oil, linseed	1,89,000
Cranes, electric and hand	1,79,000
Meters, electric	1,67,000
Oxygen gas	1,53,000
Electrodes for welding purposes	1,41,000
Meters, water	1,39,000
Zinc ingots	1,39,000
Asbestos cement sheets	1,39,000
Charpoys, G. I., pipe	1,35,000
Bricks, fire and fire clay	1,28,000
Wire fencing	1,23,000
Miscellaneous electrical stores (lampholders, shades, tapes, etc.)	1,19,000
Pipes and fittings, galvanized iron and black	1,15,000
Turpentine	1,13,000
Sheets, steel, piling	1,07,000
Fittings, railway carriage	1,00,000
Creosote	1,00,000
Belting for machinery	93,000
Tools, railway track	91,000
Acids and chemicals	88,000
Air compressors	83,000
Oil, gas making	80,000
Hoses, canvas, and rubber	79,000
Roofing materials	71,000
Aerodrome lighting and floodlight equipment	70,000
Antimony	67,000
Fire engines and extinguishers	66,000
Calcium Carbide	65,000
Files, steel	60,000
Disinfectants	59,000
Fittings, lavatory and bath	58,000
Cooking ranges	58,000
Wire ropes, steel	57,000
Sluice valves	50,000
Tanks, steel and staging	50,000

28. *Running and Rate contracts.*—Particulars of the Rate and Running contracts arranged during the year are given in Appendix IX. The facilities for the quick and economical supply of stores under these contracts have been increasingly utilised by all classes of indentors.

29. *Work done by Provincial Circles.*—The total value of purchases made during the year by provincial offices amounted to Rs. 76,10,269 as compared with Rs. 51,75,515 during 1933-34, an increase of Rs. 24,34,754 or 47%. The number of indents increased from 11,696 to 15,363 and the number of contracts placed increased from 17,893 to 23,043.

During the year 109 firms applied for registration as approved contractors, Investigations were made by the Controllers of Purchase and 62 applications received favourable reports.

Details of contracts placed by the Provincial Circles and of the fees earned are shown in Appendix V.

30. *The Calcutta Purchase Circle.*—The total value of stores purchased by this Circle during 1934-35 was Rs. 50,07,167 as compared with Rs. 30,33,031 for the previous year, an increase of Rs. 19,74,136 or 65%. The number of indentors increased from 343 to 411. The number of indents received increased from 6,900 to 8,696. The number of items increased from 19,301 to 23,389. The number of orders placed increased from 9,353 to 11,608. These figures indicate very substantial progress.

The capacity of 61 new firms was investigated during the year and of these 29 were registered as approved contractors.

31. *The Bombay Purchase Circle.*—The value of stores purchased by this Circle amounted to Rs. 14,97,508 as against Rs. 12,55,720 during 1933-34, an increase of Rs. 2,41,788 or 19%. The number of indentors increased from 215 to 341. The number of indents increased from 2,611 to 3,158. The number of items increased from 8,625 to 9,738. The number of contracts placed increased from 4,295 to 4,830.

Applications for registration were received from 34 new firms and of these after investigation 21 were reported on favourably.

32. *The Karachi Purchase Circle.*—This Circle purchased stores to the total value of Rs. 11,05,594 as compared with Rs. 8,86,764 during 1933-34, an increase of Rs. 2,18,830 or 24%. The number of indentors increased from 164 to 200. The number of indents increased from 2,185 to 3,509. The number of items increased from 8,392 to 12,995. The number of contracts placed increased from 4,245 to 6,605.

During the year 14 new firms applied for registration as approved contractors. Of these 12 were given favourable reports.

33. *Comparison with the London Stores Department.*—Appendix X furnishes a comparison of the numbers and values of contracts for stores and freight placed by the India Store Department, London, with the numbers and values of the contracts made by the Indian Stores Department, during the years 1931-32 to 1933-34. Appendix XI provides a comparison between the values of contracts placed by the two organisations, for various authorities and classes of stores, during the same period. The figures relating to the London Store Department have been converted into Indian currency at the rate of 1*s.* 6*d.* to the rupee. The figures of the London Store Department for 1934-35 are not yet available.

CHAPTER IV.

Work of the Inspection Branch.

Administrative Inspection Branch at Headquarters.

34. *General.*—The work done by the Inspection Branch at Headquarters during the year greatly exceeded any previous year's record. This was due to substantial increase in the purchase operations of the Department, particularly those relating to the indents for engineering stores received from the Railway Administrations. The heavy additions made during the year to items of Railway stores to be purchased through the agency of the Department, together with the items taken over in previous years, entailed heavy demands on the staff.

Other important functions of the Branch include the technical scrutiny of indents, the preparation of schedules of requirements, drawing up new and revising existing specifications, scrutiny of and advice on technical schemes, work connected with standardization, custody and control of samples, preparation and issue of drawings, work relating to development of indigenous products, and general control over the inspection work including co-ordination of the technical activities of the Provincial Inspection Circles.

35. *Schedules of Requirements.*—Notwithstanding the increase in the number of standard specifications and drawings issued by this and the Railway Departments, which in time will reduce demands for schedules of requirements, there has actually been a considerable increase in the number of schedules of requirements issued. The number of schedules of requirements framed during the year was 176, as compared with 131 in 1933-34.

Some of the more important schedules of requirements prepared and issued during the year are detailed below :—

1. Generating plant and electric wiring of the Agency building at Muscat (Persian Gulf).
2. Automatic Beacon installation for Uterlai (Jodhpur) Aerodrome.
3. A 750 K. W. oil engine driven alternator set for the Public Works Department, Jaipur State.
4. Three additional turbo-alternators and power station plant for the Eastern Bengal Railway.
5. A 375 K. V. A. alternator with exciter, 100 K. V. A. transformers, rotary converters or rectifier equipment H. V. switchboard, etc., for the M. E. S. Peshawar Cantt.
6. Beacons, floodlights and lighting of aerodromes for the Karachi-Delhi-Calcutta-Rangoon, and Bombay-Sukkur Air Routes.
7. Steel lighter (barge) for the Forest Department, Port Blair.
8. Steam tug for the Engineer-in-Chief, Vizagapatam.

9. Ten aeroplane hangars for the Civil Aviation Directorate.

10. Steam coaling cranes for the Eastern Bengal Railway Administration.

11. A 200 B. H. P. marine crude oil engine for the Royal Indian Navy, Bombay.

12. Sewage pumping plant for the Bezwada Drainage Scheme for the Public Works Department, Madras.

13. Engine turntables, for the Jodhpur Railway.

14. X-Ray apparatus for the Veterinary College, Madras.

15. Telephone Exchanges (one 15 line and one 6 line), cordless, for the North Western Railway Administration.

16. Local distribution sub-station switchgear for the Qadian electric supply project, P. W. D., Electricity Branch, Punjab.

17. Motor fire engine for the Karachi Corporation.

18. An 11 K. V. switchgear for Goraya—33/11 K. V. Grid sub-station and local distribution sub-station switchgear for the Phillaur-Goraya Phagwara electric supply project, P. W. D., Punjab.

19. Steel sleepers and fastenings for the Jodhpur Railway.

20. Hoist for lifting Metre Gauge locomotives for the Eastern Bengal Railway Administration.

36. *Specifications.*—The preparation and revision of specifications has continued throughout the year. Twentyfour specifications were framed and 83 specifications were revised. In addition to these, 4 specifications were scrutinised for the Army, 25 for the Central Standards Office, Railway Board, and 8 for the British Standards Institution. The total number of specifications dealt with during the year was 144.

A list of the specifications which were current at the end of the year 1934-35 is given in Appendix XII.

The arrangements, referred to in previous years' reports, for the printing of I. S. D. Standard Specifications and placing them on sale at various centres were continued. The benefits from this scheme to those interested and concerned in the specifications issued by the Indian Stores Department increase from year to year as more specifications are standardised and added to the list of saleable publications. The specifications placed on sale by the end of the year under review are shown in Appendix XII. Copies of such specifications and of lists of these specifications are procurable both in India and abroad. Lists are obtainable *gratis* and specifications can be had *on payment* of annas 8 or 10 *d.* per copy (postage extra) from the following offices :—

1. Office of the Manager of Publications, Civil Lines, Delhi.

2. Office of the Chief Controller of Stores, Indian Stores Department, New Delhi/Simla.

3. Inspectorates of the Indian Stores Department at Calcutta, Bombay, Karachi, Lahore, Cawnpore, and Madras.

4. Office of the High Commissioner for India, Publications Branch, India House, Aldwych, London, W.C. 2.

Work connected with the custody of master copies of the Army textile specifications and their corrections in accordance with the correction slips received from time to time has also increased. The total number of such specifications in the custody of the Department at the end of the year was 305 as against 258 at the end of the previous year.

37. *Standardization.*—The objects of the standardization work carried out by the Department were set forth in paragraph 37 of the Administration Report of 1932-33. This work, if judiciously carried out, must result in the adoption of well defined standards for each article, elimination of variety of standards for the same article and of unnecessary sizes and types and in the unification of design and make up. Advantage was taken of every opportunity to effect further standardization in respect of stores purchased for Government Departments.

The closest liaison between the Railway Board's Standards Office and the Inspection Branch of the Department was fully maintained during the year and there was complete co-operation between the two organisations in all matters relating to standardization of Railway supplies purchased through the agency of the Indian Stores Department. The Inspection Branch at Headquarters also maintained the closest possible contact with other departments and Institutions issuing specifications, with the object of unifying standards as far as feasible and, where necessary, modifications were proposed in order to make the specifications suitable for Indian conditions. Standards laid down by the British Standards Institution were adopted, as far as practicable, in all specifications prepared or revised during the year. Where such standards did not exist or were inapplicable, such as, for example, in the case of textile stores, every endeavour was made to consult the standard specifications enforced by other Government Departments and those adopted by approved makers. In this connection it may be noted that during the year arrangements were made for the interchange of specifications between the Indian Stores Department and the Canadian Engineering Standards Association. Mention has already been made, in the preceding paragraph, of the specifications prepared or revised during the year. Considerable progress has been made in connection with the standardization of stores purchased by the Indian Stores Department on behalf of Railway Administrations and other indenting departments. Some of the articles in respect of which standardization work was carried out during the year are :—

Serge blue, jerseys woollen, red pugree cloth, lining cloth, canvas for paulins, wool worsted for use in oil cups of locomotives, imitation leather cloth, upholstery hides, skin wash or chamois leather, flax canvas hose, India rubber hose, hand carts and trollies for the P. and T. Department, galvanised fencing wire stranded, sal ammoniac, rosin, mosquito curtains, nainsook, bags dosuti Postal, overhead spanning aerial line cable, punkha motor sets A. C. or D. C., and glass battery jars.

38. *Preparation or scrutiny of technical schemes.*—A number of schemes were prepared or subjected to technical scrutiny by the Department. Forty-nine enquiries as against 37 in the previous year were received from various indenting officers asking for technical advice and assistance.

39. *Custody and control of samples.*—A section of the Inspection Branch at Headquarters is entrusted with the work of receipt, classification, storage and issue of samples received against invitations to tenders and those obtained for development, and standardization purposes. It dealt with 10,451 samples during the year as against 10,136 in the previous year.

40. *Drawing Office.*—The general increase of work in the Inspection Branch at Headquarters is apparent also in the work of the Drawing Office. A duty which has devolved on the Drawing Office in recent years has been the custody of record copies of I. R. S. drawings and keeping them corrected to date in accordance with the Notifications issued by the Central Standards Office for Railways. This is an important and responsible duty in view of the increasing use the Railway administrations make of the Department in the matter of the purchase and inspection of their supplies. Upto the end of the year 1934-35, 3,148 tracings and 3,121 prints of standard drawings were received in the Drawing Office from the Central Standards Office for Railways and 381 amendments were carried out in the standard drawings, in accordance with the Notifications issued by that Office.

The arrangement under which I. S. D. standard specifications are issued as saleable publications was extended to I. S. D. standard drawings. The first list of standard drawings was issued in July 1934 and subsequent lists are issued half-yearly. The lists are supplied *gratis* to those who apply for them and publicity regarding the standard drawings is given monthly in the Indian Trade Journal. The results of placing these standard drawings on sale appear to indicate that the work and expense of publishing them has been amply justified and has been appreciated by the interests concerned.

As in former years, the Drawing Office rendered considerable assistance in the work of standardization, which included many new items of stores for the Postal and Police Departments.

During the year 123 drawings, 141 tracings and approximately 48,000 square feet of ferro and other prints were made, as compared with 132 drawings, 234 tracings and approximately 35,300 square feet of ferro and other prints during the previous year.

41. *Erection-at-site orders.*—Erection-at-site orders cover such contracts for plant and machinery as are required to be erected by the contractor and to be inspected and tested by the staff of the Department after their erection at site. Thirty-two orders of this class were placed during the year, aggregating in value

Rs. 12,66,798, as against 31 orders valued at Rs. 14,99,519 of the previous year. Some of the more important of these orders are mentioned below :—

	Rs.
1. Three turbo alternators and power station plant for Kanchrapara and Saidpore power houses, Eastern Bengal Railway	4,18,457
2. Oil engine generators, switchboards and feeder panels for Lalmonirhat, Katihar and Paksey, Eastern Bengal Railway	1,61,164
3. A-750 K. W., 3300 volts oil engine driven alternator set for Jaipur power station	1,57,151
4. Electrically driven pumping sets complete for the extension of waterworks, Joint Water Board, Delhi	1,32,077
5. Crude oil engine driven generating set for the Rajputana Salt Sources, Sambhar Lake	60,245
6. H. T. cables and joint boxes for M. E. S., Lahore Cantonment	49,120
7. Automatic 1½ K. W. Beacon installations for the Director, Civil Aviation in India	42,049
8. Local distribution substation switchgear for the Qadian electric supply project, P. W. D., Electricity Branch, Punjab	35,254

42. *Arrangements for inspection of materials in the country of origin.*—The services of the Director General, India Store Department, London, for the inspection of materials in the country of origin, during manufacture and before shipment were utilised to a greater extent during the year than in the preceding year. The most important orders for which the services of the Director General's Inspection staff were utilized related to steel tyres, wheels and axles purchased for Railway Administrations.

Six calls for pre-inspection of materials in the country of origin were received by the Calcutta Inspection Circle during the year and forwarded to the Director General, India Store Department, London, for disposal.

Provincial Inspection Circles.

43. *Work done by the Provincial Inspection Circles.*—The year 1934-35 was one of marked progress in the total volume and value of work done by the Provincial Inspection Circles. The increase was shared in varying degrees by most of the organisations. Full details of the work done and fees earned by them are given in the sub-joined paragraphs and in appendices XIII, XIV and XV.

As compared with the records of the previous two years, an appreciably larger volume of work was dealt with under all major headings of inspection work. The total number of orders received for inspection during the year under report was 55,342, which shows a substantial increase over figure of 45,981 of the pervious year. The total value of stores inspected and charged on value was Rs. 5·25 crores compared with 4·43 crores in the preceding year. The quantity of stores inspected and charged on the tonnage basis also showed material increase, namely 52,718 tons as against 37,498 tons in 1933-34. There was also an appreciable increase in the total fees earned during the year. These were Rs. 5,99,744, as against Rs. 4,99,434 for 1933-34.

The largest increase was shown in the value of orders inspected against I. S. D. orders. This increase was due to substantial additions in the list of Railway stores purchased through the agency of this Department. The total value of such orders during the year reached the figure of Rs. 3,59,37,929, as compared with Rs. 2,93,87,348 in 1933-34. The results of the year under report in respect of stores inspected against orders placed by the Department have nearly touched the record figure of Rs. 3,60,19,564 of 1930-31, thus exceeding the figures of all other years.

Prior to the year 1930-31, the total value of stores inspected against outside orders had always been greater than that of the stores inspected against Departmental orders. For instance, the total value of the former as compared with that of the latter was approximately Rs. 3·28 and Rs. 2·34 crores respectively in 1927-28, Rs. 2·81 crores and Rs. 2·49 crores respectively in 1928-29 and Rs. 4·08 and Rs. 3·25 crores rspectively in 1929-30. The year 1930-31 marked the reversal of the relative position of the two classes of the work. In that year the I. S. D. orders inspected were valued at Rs. 3·60 crores as against Rs. 2·90 crores of orders placed direct by outside authorities. This lead has since been maintained and during the year under report the I. S. D. orders amounted to Rs. 3·593 crores as compared with Rs. 1·656 crores of the stores inspected against outside orders.

The Inspection Circles are required to keep records of all complaints received against the stores inspected and passed by them. It is gratifying to note that in spite of the fact that the number of orders inspected had been steadily increasing, the total number of complaints recorded each year has been decreasing when reckoned as a percentage of the total orders inspected. The figures for the last three years are illuminating. 167 complaints were dealt with against 55,342 orders received for insepection in the year 1934-35, as against 167 complaints and 45,981 orders of 1933 34 and 231 complaints and 40,713 orders of 1932-33.

44. *The Calcutta Inspection Circle.*—The Calcutta Inspection Circle, which is the largest and the most important of the provincial inspectorates, fully maintained, during the period under report, its lead not only in the value of work handled but also in the increase in work.

With the exception of 1931-32, this Inspectorate has been able to report an appreciable increase in the number of orders for inspection. Commencing with a modest figure of 3,800 orders received for inspection in 1924-25, the number rose to 11,859 in 1928-29. It was 15,970 in 1930-31, 19,845 in 1932-33, 21,145 in 1933-34, and during the year it has reached the high figure of 26,095.

The volume of work, as measured by the value of orders, has not, however, kept pace with the rate of increase in the number of orders. This is due to the fact that the total value of orders is dependent upon several variable factors. There has been, however, a substantial increase in the total value of stores received for inspection during the year as compared with the corresponding figures of the three preceding years. The total value of orders received for inspection during the year was Rs. 3,44,93,823 as against Rs. 3,20,78,709 in 1933-34, Rs. 2,76,34,275 in 1932-33 and Rs. 2,58,73,878 in 1931-32.

The value of stores inspected against orders placed by the Department rose from Rs. 1,16,20,752 to Rs. 1,63,19,871. This substantial increase in Departmental orders was due to the general financial improvement and the purchase by the Railways of additional items through the agency of the Department. Orders, which are placed by authorities other than the Indian Stores Department, and of which inspection only is carried out by the Department, are practically all manufacturing contracts for rolling stock, castings, permanent way materials, bridge and structural steel work, all of which require detailed and careful inspection in all stages of manufacture. The value of such stores inspected increased from Rs. 1,32,68,872 to Rs. 1,48,09,093. The increase was due wholly to the increase in the amount of rolling stock inspected on behalf of Railway Administrations. The number of wagons inspected rose from 3,031 to 3,494 and their value from Rs. 99,21,000 to Rs. 1,25,41,781.

The total fees earned during the year were Rs. 3,84,820, as compared with Rs. 3,03,866 in the preceding year.

Orders inspected on a tonnage basis also show a very substantial increase over those of the previous year, the total tonnage of these orders was 52,303 as against 36,938 in the preceding year. This is mainly due to larger quantities of sleepers inspected during the year. The total number of sleepers inspected was 4,63,942 as against 3,10,323 in the preceding year.

Cast iron pipes and specials aggregating 517 tons were inspected on behalf of the Singapore Municipality.

The following are some of the important orders received for inspection in the Circle during the year :—

	Rs.
1. Two thousand three hundred and sixtyfive wagons and underframes against orders placed by the Railway Board and Railway Administrations	44,69,337
2. C. I. plate and pot sleepers for the G. I. P. Railway ..	15,94,701
3. C. I. C. S. T. 9 type sleepers for the N. W. Railway ..	15,66,517
4. C. I. W. M. R. type and steel sleepers for B. N. Railway ..	9,25,017
5. C. I. plates for sleepers for E. I. Railway	8,17,744
6. Three turbo alternators and power station plant for Kanchrapara and Saidpore Power Houses, E. B. Railway ..	4,18,457
7. Steelwork for stores shed at Jamalpur, E. I. Railway ..	2,20,441
8. Axle boxes for the E. I. Railway	1,62,402
9. M. S. jaws for C. I. sleepers for the E. I. Railway	1,50,000
10. Steel work for Screw Pile Bridge over the Dehing and Dikhu rivers, Assam P. W. D.	1,45,966

		Rs.
11.	Points and crossings	1,43,001
12.	Steel work for storage shed for Vizagapatam Harbour ..	1,20,639
13.	Tie bars for C. I. sleepers for E. I. Railway	1,09,164
14.	Steel work for E. I. Railway Works, Tatanagar, Erection Shop No. 2	1,06,633
15.	Flange plates and fabricated steel work for type 277 girders for E. I. Railway	97,955
16.	Steel work for the new station building and platform room at Jamalpur, E. I. Railway	96,889
17.	Cotters, keys, bearing plates and other P. W. D. materials ..	90,311
18.	Axle boxes for B. N. Railway	80,593
19.	A Sixty-ton, 65 ft. span E. O. T. crane girder for E. I. Railway	41,747
20.	Steel sleepers for Bikaner State Railway	39,800
21.	C. I. pot sleepers for M. &. S. M. Railway	36,032
22.	Steelwork for 'Poon Poon' Bridge, Grand Chord, E. I. Railway	35,363
23.	Axle boxes for N. W. Railway	34,461
24.	Electrically driven pumping set and switchgear for Giridih Jubilee Pits Nos. 1 and 2 and Joktiabad Pit, E. I. Railway	33,337
25.	Steelwork for passenger platform shed No. 2 at Jamalpur, E. I. Railway	30,882
26.	Engine turntable, hand-operated, for Jodhpur Railway ..	25,050
27.	Steelwork for foot overbridge No. 2 at Jamalpur, E. I. Railway	22,380
28.	Steel work for new shed over Island Platform at Gomoh Station, E. I. Railway	16,716
29.	Steelwork for passenger platform shed No. 1 at Jamalpur, E. I. Railway	15,822

Eleven 'erection at site' orders against 3 in the previous year, were inspected, the most important being :—

		Rs.
(*i*)	Oil engine generators, switchboards and feeder panels for Paksey, Katihar and Lalmonirhat, E. B. Railway ..	1,61,164
(*ii*)	Substation plant for pumping scheme, Kashi	36,567
(*iii*)	Generating set for E. B. Railway	21,570
(*iv*)	Steel tank and staging for Garrison Engineer, M. E. S., Lucknow	17,788

The works and premises of 21 firms were inspected and reported on during the year, of which 8 were recommended for registration as "Approved Contractors".

At the close of the year under review, the E. I. Railway Workshops at Tatanagar which were closed in 1931, were re-opened for the construction during 1935-36 of I. R. S. coaching under-frames required for Railways. The inspection has been entrusted, as formerly, to this Circle. Raw materials and minor components only were inspected during the year. Fabrication in earnest will commence early in 1935-36.

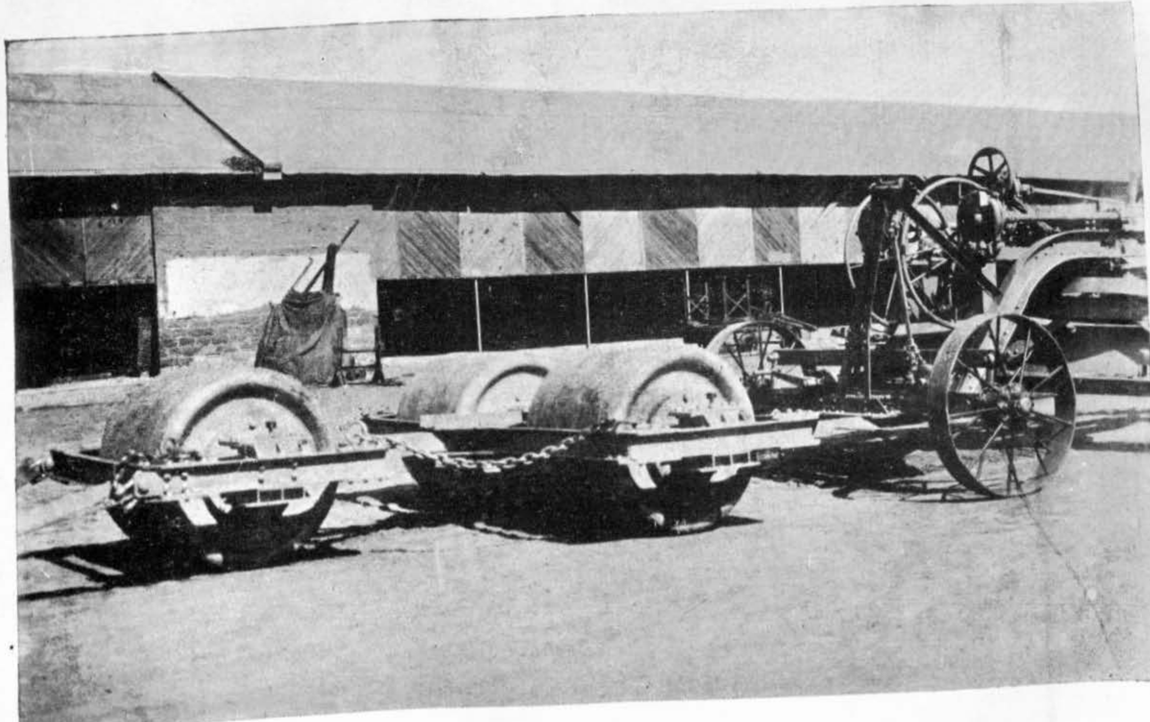
The Controller of Inspection, Calcutta Inspection Circle, was appointed during the year as a Collector for the purposes of assessment and collection of the duty of excise on steel ingots under " The Steel Ingots (Excise Duty) Order 1934 ".

45. *The Bombay Inspection Circle.*—There has been an appreciable increase during the year under report, in the work of this Circle of inspection. The number of orders received for inspection during the year was 11,998, as compared with 10,567 in 1933-34. The value of stores inspected and passed against these orders amounted to Rs. 95,11,455, as against Rs. 77,14,048 of the preceding year.

The bulk of the work of this Circle relates to the inspection of orders placed by the Department itself. The number of such orders received for inspection rose from 10,504 to 11,891 and the value of stores inspected against these orders amounted to Rs. 78,69,331 as compared with Rs. 61,63,334 in the preceding year, showing an increase by about 28%. The number of demands received for inspection from other departments also increased from 63 to 107, and the value of work inspected rose from Rs. 15,50,714 to Rs. 16,42,124. The tonnage of material inspected, on a weight basis, however, decreased from 560 to 415 tons. This decrease is due to one foundry, which is being re-organised on a modern scale, having temporarily discontinued to make use of the services of this Circle for the inspection of its products.

Some of the important orders dealt with during the year were :—

	Rs.
1. B. B. and C. I. Railway order for steelwork in reconstruction of the Nerbudda Bridge, mention of which was made in paragraph 46 of the Administration Report for the year 1933-34, was completed during the year. A photograph of span No. 16 of this bridge is illustrated as frontispiece	24,71,822
2. Electric ceiling fans for the Central P. W. D., Delhi.. ..	62,400
3. Switches complete, for the S. I. Railway	27,785
4. Harrington ' V ' keys for the G. I. P. Railway	20,250
5. Component parts of switches for the G. I. P. Railway ..	9,939
6. Signal fittings for Burma Railways	9,600
7. Stoneware pipes for Karachi Municipality (inspected at makers' works at Jubbulpore)	9,545



A Three-ton triple roller manufactured in Karachi.
(*Vide* paragraph 46.)

8. Two prison vans with bodies built in India for the I. G. of Railway Police, Mount Abu		Rs. 5,970
9. Ambulance van with body built in India for Karachi Municipality		4,504

During the year textile goods valued at Rs. 9,09,726 were inspected against Rs. 7,71,256 in the previous year.

Seven ' erection at site ' orders to the value of Rs. 24,555 were received and out of these three were completed during the year.

46. *The Karachi Inspection Circle.*—The year under review shows a substantial increase both in the number and value of orders dealt with during the year, as compared with those of the preceding year. There is every indication that the steady increase in the work of this Circle since the year 1932-33 will be maintained.

The value of orders received for inspection increased from Rs. 42,41,596 in the year 1933-34 to Rs. 57,71,606 in the year under review. During the year, 6,395 orders valued at Rs. 46,51,504 were actually inspected and passed as against 5,377 orders amounting to Rs. 39,88,069 of the previous year. Of the 6,395 orders dealt with, 6,388 were placed by the Indian Stores Department and 7 by outside authorities.

Engineering, hardware and miscellaneous stores continued to be the bulk of the materials inspected by this Circle. Oils, lubricants and paints were also inspected and passed in appreciable quantities against the Department's contracts. Their total value during the year was Rs. 14,83,533. A number of orders for wholly or partly manufactured materials, such as steel sectional tanks, floodlight towers, petrol and kerosene storage tanks, trough and girder spans, 4 wheeled metre gauge wagon bodies, etc., amounting to Rs. 2,14,081, were also inspected. A photograph of a three-ton triple roller, manufactured locally, under the inspection of this Circle, faces this page.

A feature of special interest in the inspection work of this Circle during the year was the manufacture of 25 open and 25 covered M. G. wagon bodies for Bhavnagar State Railway. Wagon work on mass production lines involving the use of jigs had never before been attempted in Karachi and in this connection very substantial assistance in designing the jigs was given to the firm by the officer-in-charge of the Circle.

Mention was made in paragraph 47 of the Administration Report for the year 1933-34 of the inspection by the Karachi Inspection Circle of two fifty-

ton composite steel and timber barges for the Port Commissioner, Veraval. A photograph of the barge faces this page.

During the year 11 'erection at site' orders for plant and machinery, as against 10 in the previous year, were inspected, the most important being:—

(1) Portable air compressors for N. W. Railway at Sukkur.

(2) Electrically driven heavy duty carriage and wagon axle journal re-turning and burnishing lathes at Sukkur.

(3) Crude oil engine driven air lift-cum-centrifugal pumping plant for Pad-Idan Railway Station.

(4) Bar straightening, reeling and polishing machine for N. W. Railway at Sukkur.

(5) A fifty-ton tensometer testing machine and Vickers pyramid diamond hardness testing machine at Drigh Road, Sind.

(6) Motor driven centrifugal pumping set for Kotri Railway Station.

(7) Electrically operated capstan for Carriage and Wagon Shops, Sukkur, N. W. Railway.

Seven non-departmental orders inspected during the year consisted of steel keys and trough and girder spans for the Jodhpur Railway, and the 50 four-wheeled metre gauge wagons referred to above.

47. *The Upper India Inspection Circle.*—The Upper India Inspection Circle, with its headquarters at Lahore and its jurisdiction extending over the whole of the Punjab, the N. W. F. P. and the Province of Delhi, was in the sixth year of its operations.

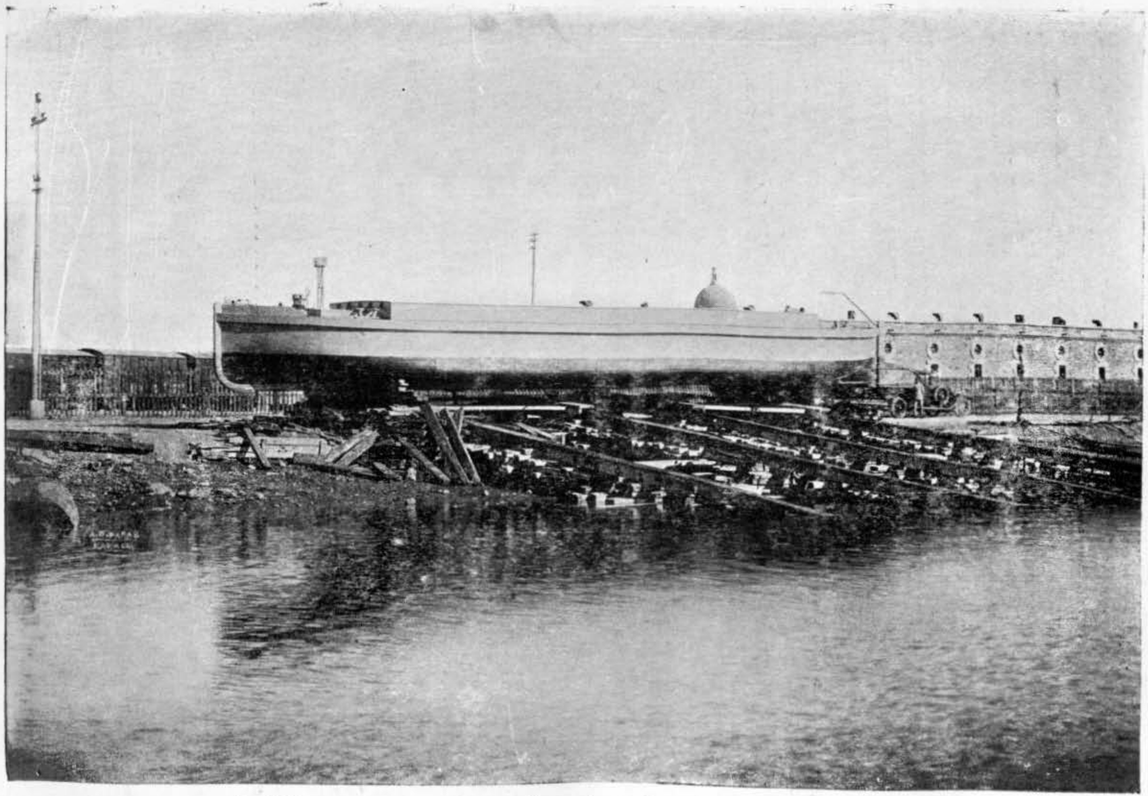
Although the inspection and tests of plant and machinery form the principal duty of this Circle, its work connected with the inspection of textiles, general engineering and hardware stores has been steadily increasing.

The total number of orders received for inspection was 4,083 as against 2,706 in the previous year, *i.e.*, an increase of about 51%. The total value of orders received for inspection rose from Rs. 43,93,335 in 1933-34 to Rs. 44,30,409 in the year under report though the value of stores actually inspected during the year showed a decrease from Rs. 45,36,463 to Rs. 41,51,288.

The proportionately greater increase in the number of orders as compared with the increase in their value is due to the fact that there have been a large number of individual orders of comparatively smaller value.

There has been a material increase in the textile work of this Circle during the year. The total value of textile goods inspected amounted to Rs. 3,16,576 approximately, as against Rs. 1,60,000 in 1933-34, *i.e.*, an increase of 98%. The chief items of textiles inspection were woollen and cotton putties, yarn, blankets, flannel silver grey, blue serge cloth drab mixture, carpets, reels cotton thread, barrack sheets, lungies, kullahs, fringes and shouldaries, most of which were the indigenous products of the Punjab.

During the year, 69 'erection at site' orders for plant and machinery were dealt with as against 56 in the previous year.



A Fifty-ton composite steel and timber barge for Veraval.
(*Vide* paragraph 46.)

Some of the important orders inspected during the year were :—

	Rs.
1. Train lighting batteries for the N. W. Railway	96,032
2. Pumping plants for M. E. S., Fort Milward, Rawalpindi, Campbellpore, Lahore and Lucknow	65,400
3. Switchgear equipment for N. W. Railway Power Station, Moghalpura	55,720
4. Steel tubular poles for the Punjab P. W. D., Electricity Branch	51,357
5. Train lighting belting for the N. W. Railway	47,259
6. Electric mining and shunting locomotives for the N. I. S. R., Khewra	45,187
7. High production carriage and wagon wheel turning lathe for the N. W. Railway, Moghalpura	43,706
8. Salt screening and crushing plant for the N. I. S. R., Khewra	42,421
9. Pumping plants for Kaushalya, Ambala Cantonment, Sargodha, Mamukanjan, Jakhal and Nankana Sahib, N. W. Railway	40,154
10. Railway carriage ceiling fans for the N. W. Railway ..	38,741
11. Pumping plants for Tundla, Lucknow and Bareilly, E. I. Railway	36,892
12. Motor generator sets and Booster set for the N. I. S. R., Khewra	23,547
13. A. C. ceiling fans for the Central P. W. D., New Delhi ..	20,962
14. Hydraulically operated flash welding machine for the N. W. Railway, Moghalpura	18,384
15. Portable compressor sets for M.E .S., Peshawar	14,175
16. Spring load testing machine for the N. W. Railway, Moghalpura	12,280
17. Road roller for the Central P. W. D., New Delhi	10,980
18. Switchboard for M. E. S., Lahore Cantonment	10,422

As in the past, the services of this Circle were utilised to a considerable extent by other Provincial Inspectorates for investigation of complaints received from consignees within its area. Forty-three such investigations were made during the year.

The works and premises of 27 firms were inspected out of which 18 were recommended for registration as " Approved Contractors ".

48. *The Cawnpore Inspection Branch.*—The increase in the work of the Cawnpore Inspection Branch recorded in the last year's report was more than maintained during the year under report. The value of stores inspected and fees earned and the number of orders inspected during the year, compared with 1933-34, were as follows :—

Year.	Total value of stores inspected.	Total fees earned.	Total No. of orders inspected.
	Rs.	Rs.	
1934-35	16,36,439	16,383	2,820
1933-34	15,45,864	15,497	2,413

The activities of this Inspectorate have been mainly concerned with the inspection of textile stores, leather goods, hardware and miscellaneous articles. For the first time, the inspection of plant and machinery, also tanks and staging, was entrusted to this Branch. The bulk of the work of this organisation relates to inspection of orders placed by the Department itself. The value of engineering and hardware stores inspected and passed during the year was Rs. 4,97,698 and the value of textile stores was Rs. 11,38,741 against the previous year's figures of Rs. 4,52,220 and Rs. 10,93,644, respectively.

Two orders amounting to Rs. 3,814 were received during the year from the Palestine Government for the inspection of tents and materials.

Some of the important items handled during the year were :—

Cotton waste.

Drill, blue.

Cardigan, jackets.

Jerseys, woollen.

Banians, cotton.

Durries.

Tents.

Postal dosuti bags.

Cotton yarn.

Twine balls, cotton.

Leather goods for the Police and Postal Departments.

Castor oil.

Linseed oil.

Spirit, methylated.

Turpentine.

Target apparatus.

Trollies.

Locks.

Handcuffs.

Badges.

Buttons.

Sealing appliances.

The works of 10 firms were inspected, out of which 6 were recommended for registration as "Approved Contractors".

Cottage industries of Aligarh engaged in the manufacture of locks, handcuffs, buttons, badges, lead seals, scales and weights, etc., are under the inspection of this Inspectorate and all possible assistance in the form of advice and demonstration was given by the staff of the Inspectorate.

49. *The Madras Inspection Branch.*—The Inspection agency at Madras is a comparatively small organization constituted mainly for the inspection of textile goods, but there has been a steady increase in the work connected with the inspection of hardware stores. In 1929-30, out of the total value of stores inspected amounting to Rs. 8,04,066, textile stores were valued at Rs. 5,59,438 and hardware and miscellaneous stores amounted to Rs. 2,44,628. The relative values of the two classes of stores in 1934-35 were Rs. 5,80,470 and Rs. 8,41,947 respectively, which clearly indicates that the field of operation of this Inspectorate is expanding.

During the year the volume of work which passed through this Branch was greater, although the total value of orders inspected and total fees earned were less, than those in 1933-34. The total number of orders received for inspection increased from 3,457 to 3,536 but the value of stores inspected decreased from Rs. 16,27,914 to Rs. 14,22,417. This decrease, as explained below, is due to reduction in the yardage of drill cloth inspected during the year, as compared with that in the previous year.

The value of textile stores inspected was Rs. 5,80,470, as against Rs. 7,74,275 in the year 1933-34 and that of engineering and hardware stores Rs. 8,41,947 against Rs. 8,53,639 in the preceding year. Although the difference in the value of engineering stores inspected during the year, as compared with that of the previous year, is not great, yet there has been an appreciable reduction in the value of textile work done. This is chiefly due to decrease in the quantity of khaki drill and twill purchased during the year from the firms located in this centre, the figures being 8,94,087 yards as against 11,54,985 during the previous year.

The value of stores inspected for Company-managed Railways and ordered through this Department increased from Rs. 1,91,843 to Rs. 2,14,891. During the year there has also been a very substantial increase, amounting to Rs. 16,886, in the value of stores inspected on behalf of Indian States.

The chief items of stores inspected were :—

1. Drills, white and khaki, and twill.
2. Canvas, cotton.
3. Yarn, woollen.
4. Pugri cloth, khaki.
5. Blankets, woollen.
6. Diesel oil.
7. Lubricating oil.
8. Paint, white lead.
9. Electric fans.
10. Bare copper conductors.

CHAPTER V.

The Metallurgical Inspectorate, Tatanagar.

50. *Work done.*—The increase in the inspection and testing work of this Inspectorate was most striking as the totals under all headings during the year under report exceeded the corresponding figures of the previous year. The total value of stores inspected and passed by the Inspectorate amounted to Rs. 447·9 lakhs as against Rs. 387 lakhs in 1933-34.

The quantity of stores inspected on the tonnage basis was 2,71,144 tons, as against 2,17,335 in 1933-34. The stores inspected and charged on value amounted to Rs. 11,33,588, as compared with Rs. 3,63,523, in the preceding year. The fees earned during the year amounted to Rs. 3,46,060, as against Rs. 2,46,518, in the previous year. The number of tests carried out during the year reached the record figure of 8,184.

Full details of the work done by this Inspectorate on behalf of the various authorities during the year, as compared with the three preceding years, are given in Appendices XIII to XVI. The more important stores inspected and passed during the year are shown in the table below :—

Description of stores.	Quantity.		Approximate value. Rs.
Rails, ordinary	73,261	Tons	80,58,710
Rails, medium, manganese	1,465	,,	1,61,150
Rails, Chrome	372	,,	52,080
Fishplates	2,912	,,	4,36,800
Structural steel	2,14,346	,,	3,00,08,440
Structural material	921	,,	1,18,453
Ship steel	141	,,	17,625
Steel sleepers	13,890	,,	12,70,804
Crossing sleepers	288	,,	40,340
Pig iron	1,140	,,	58,348
Black sheets	554	,,	85,075
Galvanised corrugated sheets	51	,,	10,849
Shell bar	10	,,	2,000
Sleepers and plates, cast iron and tie bar	26,034	,,	15,63,405
Keys, cotters and jibs	398	,,	3,17,931
Sulphate of ammonia	6,273	,,	5,45,751
Copper wire and conductors	1,164	,,	7,50,566
Copper ingots	40	,,	23,200
Cables	45,56,536	Yards	12,09,599
Lead sleeves	108	Pieces	219
Tinplates	20,166	Pieces	2,813
Oxygen gas	45,000	C. ft.	1,800
Creep pin anchors	20,100	Pieces	4,396
Implements	57,849	,,	52,648

Messrs. The Tata Iron and Steel Co.—The inspection and testing of the products of Messrs. The Tata Iron and Steel Co. constitute the bulk of the work of this Inspectorate. The Company submitted for test and certification 2·14 lakhs tons (ingot weight) of structural steel, involving 7,700 tensile tests. This quantity comes very close to the record production of 2·29 lakh tons in the year 1933-34. The orders for rails and fishplates from the Railway Board showed a substantial increase during the year as compared with the corresponding figures of the previous year. 65,000 tons of rails and 3,408 tons of fishplates were ordered as against 39,115 tons of rails and 1,720 tons of fishplates in the preceding year. Demands from other sources, including Railways worked by Indian States, amounted to 2,376 tons of rails and 80 tons of fishplates. The above figures include 54 tons of manganese rails and 124 tons of chrome rails supplied to the various Railways against the Railway Board's orders and 1,390 tons of manganese rails and 153 tons of chrome rails to other parties, including Jodhpur and Bikaner State Railways. Approximately 141 tons of ship-plates were inspected and passed on behalf of the Lloyds Register of Shipping. A trial order for 10 tons of Shell bar steel was placed with the Company by the Military authorities and the supervision and inspection during manufacture was entrusted to the Metallurgical Inspectorate.

The tonnage of steel pressed sleepers inspected and passed during the year surpassed the figures of previous years. No less than 13,890 tons of these sleepers were inspected and passed.

The manufacture of crossing sleepers by this Company for the Great Indian Peninsula Railway provided a new line of inspection for the Inspectorate. The order amounted to 288 tons, numbering 2,349 pieces.

Agricultural Implement Department of Messrs. The Tata Iron and Steel Co.—The Agricultural Implement Department also showed greater activity during the year. Fifty-seven thousand eight hundred and forty-nine implements of various types, manufactured by the concern were inspected during the year.

The Indian Cable Company.—It is satisfactory to be able to record that the factory at Tatanagar of Messrs. The Indian Cable Company, which are the only works in India engaged in the manufacture of vulcanised rubber cables, had a record output during the year. The Inspectorate examined for certification 44,85,063 yards of cables of various classes and sizes. The examination involved making 11,166 electrical tests. In addition to the above 1,044 tons of hard drawn copper wire were inspected on behalf of the Indian Stores Department. Cables of various descriptions inspected and passed during the year on behalf of the Department measured 71,473 yards in length as against 71,549 yards of the previous year. The Company also supplied 98 tons of copper conductors against non-departmental orders, of which 71 tons were against the orders placed by the Assistant Stores Purchase Officer of the Department of Industries, United Provinces.

The Indian Stores Department has taken considerable interest in this indigenous industry and it is satisfactory to note that its activities have been steadily developing and that its products can compete with the products of

approved imported makes. The Company is gradually developing new lines in cable manufacture. The following special classes of cables were inspected during the year :—

(I) Slow burning locomotive headlight cables.

(II) Signalling cables.

(III) Submarine telephone cables.

(IV) Aerial cables.

The Tatanagar Foundry Company.—Another factory at Tatanagar which provided considerable work during the year for the Metallurgical Inspectorate is the Tatanagar Foundry Company. Approximately 22,734 tons of cast iron plates and sleepers 3,300 tons of tie bars, 277 tons of keys and 121 tons of cotters and jibs valued at Rs. 18,81,336 were inspected and passed.

Lightfoot Refrigeration Co.—45,000 c. ft. of oxygen gas manufactured by Messrs. The Lightfoot Refrigeration Co., Ltd., at their Jamshedpur works, was tested and passed by this Inspectorate.

The Tinplate Co.—20,166 pieces of tinplates against an order placed by the Indian Stores Department were supplied by the Tinplate Co., and inspected by the Inspectorate.

The Indian Copper Corporation.—Forty tons of copper ingots required for the South Indian Railway were inspected and analysed by this Inspectorate during the year, as against 38½ tons handled last year.

51. *The Steel Ingots (Excise Duty) Order, 1934.*—The Metallurgical Inspector was appointed by the Governor General in Council as a Collector of excise duty on steel ingots under the Steel Ingots (Excise Duty) Order, 1934, which came in force from 1st of November 1934. The work involves a check on the output of steel of Messrs. The Tata Iron and Steel Co., Ltd.

52. *Tests and estimations.*—The number of estimations of carbon, silicon, manganese, sulphur, phosphorus, chrome, etc., was 17,364 against 15,582 in the previous year. Forty-three samples of ammonium sulphate were tested in the year 1933-34 involving 222 estimations, but during the year only 13 samples involving 63 estimations were effected. The decrease is due to the Sulphate Federation Ltd. having arranged that from 1st April 1934 the sampling of ammonium sulphate should only be carried out once a month.

The number of physical tests carried out was 62,934 as against 27,085 in the previous year. These figures do not include 6,769 tests effected on copper conductors inspected and passed by the Metallurgical Inspector, Tatanagar, nor the 11,166 electrical tests for the certification of electrical cables.

53. *Investigations.*—The number of investigations undertaken during the year was 61 as against 56 in the previous year. These investigations involved 526 tests and 433 analyses yielding a revenue of Rs. 4,621 as against 386 tests and 366 analyses yielding Rs. 3,384 in 1933-34.

Amongst the more important investigations effected, the discovery of rail failures due to " Transverse Fissures " deserves mention. This type of failure has been known for many years in America but, so far as the records of this Inspectorate show, has never previously occurred in India. The cause of this defect in rails has never been satisfactorily explained. Ten such failures have been submitted to this Inspectorate for investigation, 8 occurring in English rails and 2 in those of Indian manufacture. The matter is of considerable importance as a failure in the track due to this cause may lead to disaster.

One of the major investigations of the year was undertaken for the Bengal Nagpur Railway. The question of certain track renewals was under consideration and the Metallurgical Inspector was requested to examine rails, fishplates and fishbolts from those sections of the line.

CHAPTER VI.

The Government Test House, Calcutta.

54. *General.*—There has been a considerable improvement, during the year under review, in the volume of work done by the Government Test House. It would appear from a comparison of the work done during the last four years that the year previous to the one under review may prove to be the turning point as regards definite recovery of the loss of work which had resulted from general industrial and financial depression.

Other principal features of interest during the year were a further enlargement of the laboratories and substantial additions to the equipment of the electrical section necessitated by an increased demand for its services, and preliminary steps taken to enable this institution to undertake, in collaboration with the new Bureau of Industrial Intelligence and Research, special research and investigations on a larger scale than had been possible in the past.

The number of samples tested and reported upon during the year amounted to 8,413, this figure being 12 per cent. greater than that for the previous year and 19 per cent. greater than that for the year 1932-33. Both the Chemical and Physical Sections of the institution contributed to this year's increased figures. The total fees earned during the year, amounted to Rs. 1,97,977, as against Rs. 1,69,934 in the preceding year.

There has been a substantial increase in the work received from the Indian Stores Department, Company-managed Railways and Provincial Governments, and private concerns also made greater use of the facilities afforded by the Test House. Five thousand one hundred and fortyone samples were tested on behalf of the Indian Stores Department, 307 for the Company-managed Railways, 322 for the Provincial Governments and 1,487 for the private concerns and Indian States, as compared with 4,603, 169, 140, and 1,221 respectively for the same parties in the previous year. The increase in the amount of testing work received from private concerns is noteworthy as indicating an improvement in the trading conditions during the year, and the beginning of the recovery of the considerable amount of work which was obtained from this source before the onset of the industrial depression. A comparison of the work done during the year with the record of the three preceding years is shown in Appendices XIII and XVI, and a list of the materials tested during the year is given in Appendix XVII.

55. *Physical Section.*—The number of samples of all kinds tested by this branch of the establishment during the year was 4,411, showing an increase of 18 per cent. over the total of 3,753 dealt with during the previous year.

Increased numbers of samples, as compared with the figures for the previous year, were received and tested on behalf of the Indian Stores Department, the State Railways, the Company-managed Railways, the Provincial Governments, private concerns and Indian States, the respective figures being as follows :—

Tests carried out on bahalf of	Number of samples tested	
	1934-35.	1933-34.
Indian Stores Department	2,862	2,483
State Railways	336	296
Company-managed Railways..	101	84
Provincial Governments	165	88
Private concerns	791	662
Indian States	37	..

The increased work was shared by all laboratories of this Section, but was especially marked in the case of the Electrical and the Heavy Mechanical laboratories. A cmparative statement showing the numbers of samples tested in different laboratories is given below :—

Laboratories of Physical Section.	Percentage increase.	No. of samples tested.	
		1934-35.	1933-34.
1. Textiles	11	1,261	1,138
2. Electrical	26	399	317
3 Cement	15	720	626
4. Light mechanical	15	916	793
5. Heavy mechanical	27	1,115	879

The increase in the number of textile samples handled has been particularly marked by comparison with previous years and during the latter months of the year the completion of work by the due dates has been a very difficult matter owing to the great increase in the rate of receipt of samples.

The Electrical sub-section recommenced life tests on electric lamps and has been further occupied in the construction and installation of additional plant and equipment for this work. The number of samples tested by this sub-section does not therefore give an adequate indication of the amount of work which has been carried out during the period.

In addition to the equipment and apparatus available at the end of the last year and which was described in the report for the year 1933-34, the following new units have been acquired and are now in process of installation :—

1. One 18 K. W. motor-alternator set with Tirrill automatic voltage regulator.

2. Two multi-tapping transformers and control plug-boards.

3. One Philips photo-electric spherical photometer.

4. Four incandescent electric lamp test-racks.

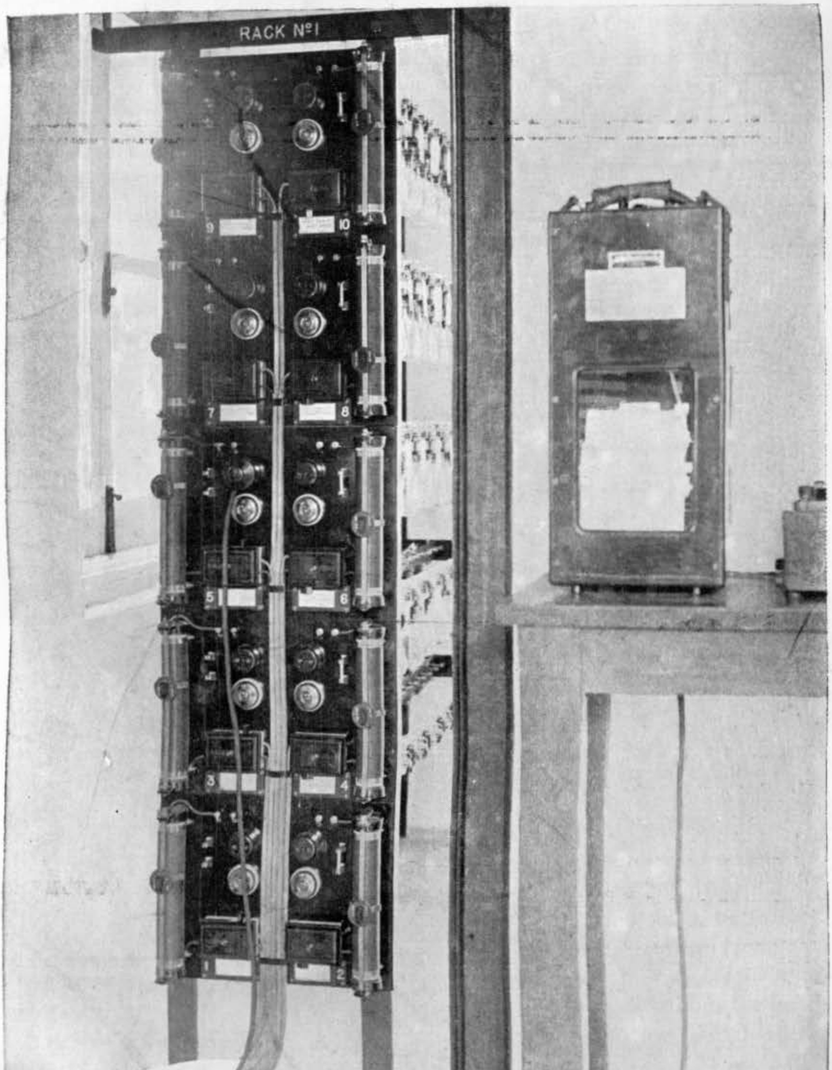
A photograph of a regulating panel end of a lamp test-rack faces this page.

The photo-electric photometer is representative of the latest developments in the science of accurate photometry and is a considerable advance in accuracy and speed of operation over the bench type of photometer. A well-equipped electric lamp testing and photometry laboratory will therefore be available shortly for this specialised work, which will be comparable in size and equipment with corresponding laboratories outside India.

56. *Chemical Section.*—The number of samples tested by this Section was 4,002 which represents an increase of 8 per cent. over the figure of 3,727 samples dealt with in the previous year. The increase was in the general chemical laboratories where 2,734 samples were tested against 2,308 in the previous year while the oil laboratory showed a decrease from 1,419 to 1,268. By comparison with the previous year, there have been substantial increases in the amount of work received from the Indian Stores Department, the Company-managed railways, Provincial Governments and private concerns. The increase in the case of the Indian Stores Department was partly due to the number of new standard samples of paints and paint materials received from firms as a result of the revision of the Indian Stores Department specifications for paint materials.

The increase in the work received from Provincial Governments was mainly due to the large number of samples of brine received from the Government of Bihar and Orissa in connection with the proposal to manufacture salt on the Orissa coast. It is anticipated that work from this source will continue to be received on a considerable scale during 1935-36.

The figures regarding the principal individual items dealt with by this Section show that there has been a considerable increase in the number of samples of paints and paint materials tested, a slight increase in the number of coal samples and a decrease in the number of samples of lubricating oils,



Regulating panel end of a lamp test rack.

Government Test House, Calcutta.

(*Vide* paragraph 55.)

the actual figures being 621, 188 and 725 against 498, 172, and 761 respectively in the year 1933-34.

During the year, arrangements were completed in connection with the testing of lubricating oils and petrol on behalf of the Director of Civil Aviation of the Government of India, and of lubricating oils on behalf of the Ceylon Government Railways.

57. *Tests of standard samples of paints and oils.*—The total number of standard samples of paints, enamels, varnishes, and paint materials received up to the end of the year was 2,654. The number of new samples received in connection with the revised Indian Stores Department specifications for paint materials was 538.

The total number of standard samples of lubricating oils received upto the end of the year was 1,334. The number of standard samples received and tested in connection with the revised Indian Stores Department specification for oils introduced during the year was 182.

The colour determination by means of the Lovibond system was carried out on 47 standard samples of lubricating oils, the Air Ministry oxidation tests on 3 standard samples and the coke-number test on 17 standard samples, in continuation of the previous work in this connection.

58. *Exposure tests on paints and varnishes.*—Exposure tests were continued on the various panels exposed in previous years, and such tests were commenced on 251 steel panels and 20 wooden panels during the year.

The total number of steel and wooden panels painted with paints, enamels, varnishes, cellulose lacquers, and solutions which have been exposed under observation up to the 31st March 1935 now amounts to 1,503.

Special investigations.—The Test House continued to be consulted and called upon to carry out special investigations in connection with important technical matters. This has become an important function of this establishment. The following special investigations were carried out during the year :—

(1) Investigation of the causes of corrosion of journals of locomotives and rolling stock of the Burma Railways.

(2) Investigations to determine the causes of severe corrosion of fire-box plates of certain locomotives of the Burma Railways, and analyses of boiler water.

(3) Investigations in connection with enquiries from two Railways regarding the effect of transporting bleach liquors and concentrated as well as dilute sulphuric acid in unlined tank wagons.

(4) Practical tests at Lillooah and Kanchrapara wagon shops on the comparative covering capacity of certain black paints for railway wagons, and analyses of samples taken during the tests.

(5) Determination of the iodine value and other characteristics of the oil, expressed in this office, from samples of mustard seeds obtained from various provinces of India.

(6) Investigation of the comparative efficiency of railway carriage roof ventilators.

(7) Investigation of methods of testing the siphoning qualities of worsted yarns for locomotive lubricators, and comparative tests of yarns.

(8) Investigation of the relative abrasive action of various types of steel-sleeved and brass-sleeved railway automatic vacuum brake piston rods on available makes of gland neck-rings.

(9) Investigation of the effect of variation of atmospheric humidity on the strength of unproofed and proofed jute fabrics.

(10) Investigation of the effect of—

(*a*) the method of annealing, and

(*b*) the variation of the period of annealing on the physical properties of arsenical copper rod of locomotive fire-box stay grade.

(11) Investigation of methods of testing railway fog-signals to determine a method and apparatus suitable for laboratory tests.

(12) Special tests on cement and concrete under closely regulated temperature conditions, at the instance of the British Standards Institution, in connection with the revision of the British Standards Specification for Portland cement.

(13) Investigation of methods of carrying out percolation tests of canvas hoses.

(14) Comparative tests of augers, with a view to eleminating service tests to destruction as a means of determining quality.

(15) Investigation and comparison of the method of conducting dye tests in use by the Havero Trading Co. and by the Test House.

The investigations in connection with items (9) to (15) inclusive are still in progress.

59. *Specifications.*—Another function of the Test House is to assist in the preparation of specifications of articles or materials for the testing of which it has special facilities. Apart from suggestions and comments made on a considerable number of specifications, including the drafts of the British Standard Institution, the following specifications were drafted or revised by the Test House during the year :—

(1) Specification for acid, sulphuric, commercial, 82 per cent.

(2) Specification for castor oil, special quality.

(3) Specification for sodium soap grease, thin consistency, for locomotive bearings.

(4) Specifications for lubricants and oils.

(5) Specification for gas, acetylene, dissolved.

(6) Specification for paint, special green, ready-mixed, to E. B. Railway shade.

(7) Specification for gold-size.

(8) Specification for sal-ammoniac tablets and bars.

(9) Specification for Leclanche type primary cells.

(10) I. R. S. specification for A. V. B. components.

The B. S. I. specifications, received for comments, covered paints, varnishes, chemicals, oils, carbide, wrought-iron, electric lamps and apparatus for various purposes.

60. *Arrangements for determination of anti-knock values of petrols and other fuels.*—In order to meet the pressing need in India for the determination of the anti-knock values of aviation petrol, a C. F. R. engine knock-testing unit ordered from Messrs. the Waukesha Motor Co., Waukesha, Wis., U. S. A., has been installed at the Government Test House. The engine is a continuously variable-compression, single-cylinder unit, and the primary reference fuels used in the determination of the knock values of samples of petrols, etc., consist of iso-octane (2, 2, 4 tri-methyl-pentane) and normal heptane. The method of test, known as the " C. F. R. Motor Method," which has also been adopted by the British Air Ministry, is based on the use of the above plant and the procedure developed by the Co-operative Fuel Research Committee, U. S. A., composed of representatives of the American Petroleum Institute, the National Automobile Chamber of Commerce, the Society of Automotive Engineers, and the U. S. Bureau of Standards.

61. *Plant and Apparatus.*—The following principal items of plant and apparatus were acquired during the year :—

1. Cambridge portable platinum-rhodium thermo-couple pyrometer.
2. Shaking apparatus.
3. " Bara " evaporating copper bath with 12 holes and set of 3 copper rings fitted with safety automatic device 220 volts D. C.
4. Two special grinding mortars and pulverisers.
5. I. P. T. lamp No. 83 for smoke-point test for kerosene.
6. All-metal medium quartz spectrograph complete with sphero-cylindrical condenser.
7. Weston Model 412 thermo-couple type multi-range voltmeter.
8. Weston Model 280 milli-ammeter.
9. Weston Model 280 milli-voltmeter.

CHAPTER VII.

The Industrial Intelligence and Research Bureau.

62. At the fifth Industries Conference held in July 1933 one of the subjects discussed was the co-ordination of industrial research. The conclusion reached was that some central co-ordinating authority should be set up for the collection and dissemination of industrial intelligence, the co-ordination of industrial research and the organisation of industrial exhibitions. The subject was discussed again at the Provincial Economic Conference in 1934 and as a result of these discussions the Government of India in the Finance Department Resolution No. F.-16 (I) F/34, dated the 5th May 1934, announced their intention to establish a central organisation for industrial intelligence and research. Detailed proposals were placed before the Sixth Industries Conference in July 1934. The scheme adopted by the Conference, will be found described in detail in bulletin No. 52 of Indian Industries and Labour. These recommendations were accepted by the Government of India, who accordingly sanctioned the formation of an organisation to be known as the Industrial Intelligence and Research Bureau. The Bureau began its operations on the 1st April 1935 and hence its actual working does not come within the purview of this report. A brief general account of its functions and organisation will however probably be of interest. The principal functions of the Bureau are as follows :—

(1) The collection and dissemination of industrial intelligence.

(2) Collaboration with Provincial Directors of Industries and industrialists in all matters relating to industrial research.

(3) The publication at intervals of bulletins relating to industrial research and other matters connected with industrial development.

(4) Assistance to industrialists in India by giving advice and making suggestions as to the directions in which research should be undertaken.

(5) To collaborate with the various organisations of the Central and Local Governments with a view to ensuring that specifications prepared or issued by them provide as far as possible for industrial standardization.

(6) To assist in the organisation of industrial exhibitions in India.

The Bureau is at present attached to the head office of the Indian Stores Department, in order that it may benefit from all the available resources of the Department in the form of information regarding industries, accumulated technical knowledge and experience and the facilities for research work which the Department possesses. It will however be organised on self-contained lines in order that it can at any time be separated from the Indian Stores Department and formed into an independent Department.

The Bureau is in charge of an officer designated as the Director, assisted by an Assistant Director and the necessary technical and clerical staff. In order that the Bureau may maintain close touch with the Central Government Departments and Provincial Governments and industrial interests, an Advisory Council has been established and will advise and collaborate with the Director

in all matters connected with the Bureau. The Advisory Council is constituted as follows :—

(*a*) Members nominated by the Government of India to represent the Departments of Industries and Labour, Railways, Commerce, and the Imperial Council of Agricultural Research.

(*b*) The Director of Industries of each Province or the Provincial Officer entrusted with industrial affairs.

(*c*) Corresponding officers of the States of Hyderabad, Mysore, Baroda, Gwalior, Jammu and Kashmir, Indore and Travancore and such other States as may subsequently enter the scheme.

(*d*) Non-official members nominated by Provincial Governments.

(*e*) Non-official members nominated by the Government of India ; and

(*f*) Such additional members as the Advisory Council may co-opt.

The Director of the Bureau is *ex-officio* Secretary of the Council.

In order to finance the working of the Bureau a sum of Rs. 5 lakhs has been sanctioned by the Government of India to cover the cost of working for the first three years.

In addition to the work undertaken in the laboratories of Provincial Governments, a certain amount of research work will be undertaken at the Government Test House where a Research Branch is to be opened shortly. This Branch will be financed from the sum of Rs. 5 lakhs sanctioned for the Bureau and, it is anticipated, will absorb about Rs. 60,000 a year.

The Bureau intends to publish from time to time bulletins relating to industrial intelligence and other matters connected with industrial development. To encourage the submission of papers by those engaged in research work, a sum of Rs. 10,000 a year is to be set aside for the purpose of awarding prizes for suitable contributions.

The Director, Mr. N. Brodie, was appointed in November 1934 some months before the formal opening of the Bureau, to enable him to make preliminary arrangements. The Director toured extensively during December 1934 and January and February 1935, visiting all the provinces of British India and the Indian States participating in the scheme. Subsequently detailed proposals for research and for the activities of the Bureau generally have been formulated and were placed before the Advisory Council for consideration. Some other members of the staff have now been appointed and steps have been taken for the recruitment of the remainder. The sanctioned staff of the whole organisation is as follows :—

Headquarters Staff.—

1 Director.

1 Assistant Director.

1 Superintendent.

2 Technical Assistants.

5 Assistants.

13 Clerks.

2 Stenographers.

1 Tracer.

2 Duftries.

1 Duffadar.

4 Peons.

Government Test House, Research Branch.—

1 Research Officer.

1 Assistant Research Officer.

5 Chemical Assistants.

3 Physical Assistants.

5 Clerks.

1 Mistry.

3 Bearers.

3 Peons.

CHAPTER VIII.

Registration of Firms.

63. *Registration of firms at Headquarters Office.*—The number of firms registered on the books of the Department as approved manufacturers or suppliers of stores of various descriptions increased from 3,389 at the end of the year 1933-34 to 3,441. Full details of this number, indicating the areas in which they are located and the classes of stores they manufacture or supply, are given in the subjoined statement :—

Description of Stores.	Bengal.	Bombay.	Karachi.	Madras.	Punjab.	United Provinces.	Delhi.	Burma.	Bihar and Orissa.	Central Provinces.	Assam.	N. W. F. P.	Other than British possessions.	Firms outside India.	Total.
(1) Stores falling under rule 4 of the Rules for the supply of articles required to be purchased for the public service—															
(2) Important plant and machinery and iron and steel work.	27	9	2	4	2	2	..	2	5	1	..	..	..	1,056	1,110
Other stores.															
(3) Railway materials	77	52	5	12	14	4	9	8	5	..	1	..	..	71	258
(4) Mechanical equipment	179	144	22	35	34	16	24	32	4	..	1	..	7	208	706
(5) Electrical equipment	116	91	17	26	28	13	20	15	3	..	1	1	10	138	479
(6) Structural engineering	20	6	3	1	4	2	4	3	..	..	..	..	1	1	45
(7) Hardware	111	83	23	23	36	36	18	13	4	1	1	1	10	42	402
(8) Implements and tools	71	46	9	16	20	15	12	11	..	..	2	1	3	40	246
(9) Metals	99	66	16	17	21	10	16	15	5	1	..	1	3	20	290
(10) Oils	57	38	4	15	12	12	6	8	1	..	2	..	7	11	173
(11) Paints	64	47	14	19	7	3	6	8	2	1	2	..	4	14	191
(12) Chemicals (excluding medicines and drugs).	54	27	10	7	10	7	7	9	..	..	..	..	3	5	139
(13) *Textiles stores.*															
(*a*) *Cotton materials*	92	83	4	11	41	35	17	10	..	3	..	..	9	14	319
(*b*) *Woollen materials*	25	21	2	6	14	21	6	2	..	..	..	1	10	1	109
(*c*) *Jute, flax and hemp materials* ..	65	25	6	3	18	8	2	5	1	1	..	..	3	8	145
(*d*) *Silk goods*	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
(14) Leather goods	20	13	2	3	11	21	5	3	..	..	..	..	..	8	86
(15) Miscellaneous stores	321	242	46	57	104	77	69	43	6	11	3	3	21	104	1,107
(16) Scientific instruments and Laboratory equipment.	32	16	1	5	9	4	2	2	..	1	..	..	..	17	89
Total ..	1,430	1,009	186	260	385	287	223	189	36	20	13	8	91	1,758	5,895
Overlapping figures for firms registered for more than one item.	883	571	102	130	151	112	119	120	10	5	9	3	30	209	2,454
Net Total ..	547	438	84	130	234	175	104	69	26	15	4	5	61	1,549	3,441

64. *Registration of Firms at Local Purchase Circles.*—In addition to the numbers mentioned in the preceding paragraph, forty-seven firms were added to the local lists of approved suppliers maintained by the Provincial organisations of the Department. Of these 17 are located in the Bengal Presidency, 19 in the Bombay Presidency (excluding Sind), 10 in the Karachi area and one in the Mysore State. The total number of firms registered on local lists in various territories on the 31st March 1935 was as follows :—

Territory.	Registered on the list of the C. P., Calcutta Circle.	Registered on the list of the C. P., Bombay Circle.	Registered on the list of the C. P., Karachi Circle.	Total.
Bengal	277	..	..	277
Bombay Presidency	..	182	..	182
Karachi	..	..	102	102
Madras Presidency	13	13	..	13
United Provinces	2	..	..	2
Bangalore (Civil and Military Station)	1	1	..	1
Bangalore (Mysore State) ..	3	3	..	3
Total ..	296	199	102	580

65. *List of Firms Registered for Important Plant, Machinery and Iron and Steel Work.*—This list is issued under Rule 4 of the "Rules for the supply of articles required to be purchased for the public service." The process of overhauling referred to in the last year's report was continued ; 44 new firms were registered during the year and the total number at the end of the year stood at 1,110. This list, though mainly issued for the information of the purchasing officers of the Central Government, has been adopted by several Local Governments. Registration in this list is also keenly sought after by manufacturers and their agents. Copies of the list can be obtained on payment from (*i*) the Manager of Publications, Civil Lines, Delhi, (*ii*) the Government of India Book Depot, 8, Hastings Street, Calcutta and (*iii*) the Office of the High Commissioner for India, India House, Aldwych, London, W. C. 2.

CHAPTER IX.

ENCOURAGEMENT OF INDIAN INDUSTRIES, PURCHASES OF INDIGENOUS PRODUCTS, AND OTHER ACTIVITIES OF THE DEPARTMENT.

66. *Advice to manufacturers and encouragement to Indian industries.*—The Department continued to take advantage of every opportunity that offered to encourage and assist manufacturers in India in improving the quality of their products by means of technical advice and suggestions and in bringing these upto the required standards. Efforts were continued to have recourse to indigenous sources of supply in substitution of imported products whenever it was found that the substitution was possible, compatible with needs for economy and efficiency.

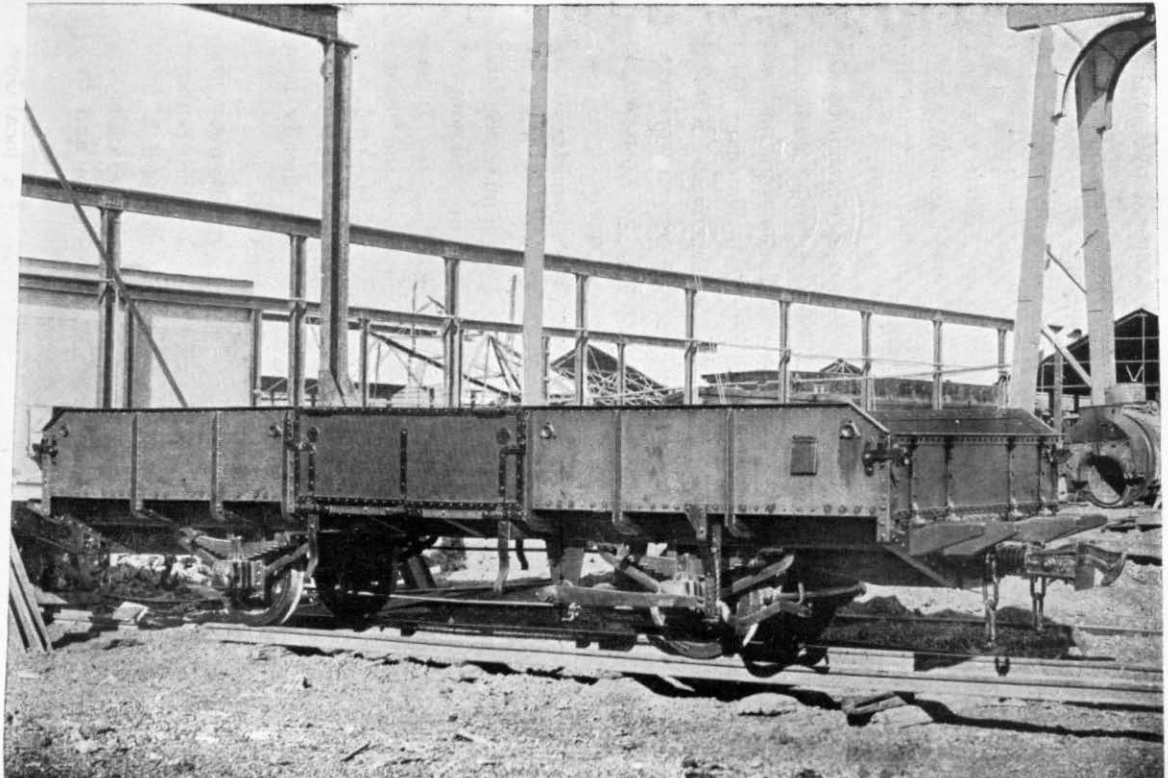
67. Among articles to which attention was specially devoted during the year for the purpose of developing their manufacture in India or their utilization in preference to imported articles, the following may be mentioned :—

Steel castings, waterproof garments for the Police, handcuffs, clasp knives, cooking ranges, electric dry cells, electric bulbs, electric fans, railway wagons, locks, road signs, enamelware, earthenware troughing, buttons, split brass rings, barometer tubes, specimen jars, wide mouth glass bottles, scales and weights, paints, insulating cotton tapes, lanterns, whistles, sulphuric acid, soaps, stannic chloride, red oxide, wire nails, bedsteads, and leather goods.

Details of a few notable instances are given in the following paragraphs:—

1. *Castings.*—It was stated in paragraph 67 of the Report for the year 1933-34 that the inspection of the entire output of castings at the works of three firms in Bombay was being carried out by this Department. This inspection work continued during the year under review at the works of two firms and the Provincial Inspectorate rendered all possible help by means of technical advice and suggestions. The third concern are re-organising their foundry on a modern scale and it is reported that they would utilise the services of the Inspectorate as soon as they have again started functioning.

A firm in Calcutta, having no previous experience in the production of cast steel or in making steel castings, experienced difficulties in working to the standards of the relevant specification. Necessary technical advice and assistance were rendered by the Calcutta Inspection Circle, regarding the design of drop testing appliances, the methods and standards of moulding, the preparation of check gauges and in various other directions, in connection with their recently added plant for the production of steel castings.



An open Metre Gauge wagon constructed in Karachi.

(*Vide* paragraph 67.)

2. *Wagons.*—Assistance in the building of wagons was rendered by the Calcutta Inspection Circle to a firm in Calcutta who have had no previous experience of wagon building, or a member of the staff experienced in the work. The layout and proposed methods of fabrication were discussed by the Inspectorate with the management and the firm were shown methods of assembly and adjustment and the tolerances admissible throughout.

A firm in Bombay carried out assembly of goods wagon fabricated components against an order placed direct by the buyer but under the inspection, for the first time, of the Controller of Inspection, Bombay. Their work had to be supervised practically every day and technical advice and assistance were given to them on assembling and riveting, in order to bring the workmanship and finish to the required standards.

An order for 50 M. G. wagons was placed with a firm in Karachi by the Manager and Engineer-in-Chief of a Railway worked by an Indian State and inspection thereof was entrusted to this Department. Wagon work on mass production lines by means of jigs had never been attempted in Karachi. Considerable technical assistance had to be rendered to the firm by the Karachi Inspection Circle, in the design of the jigs and in raising the general workmanship and finish to approved standards. A photograph of an open wagon constructed under the inspection of this Circle faces this page.

3. *Locks.*—The constant pressure maintained by this Department on firms in Aligarh who have held, or still hold, I. S. D. lock contracts, has been of appreciable benefit towards improvement in the standard of supplies. Several improvements have been effected in lock design and manufacture and some of these have been patented. Inspection of locks in Aligarh by the Indian Stores Department has assisted towards further improvement of the general standard and there is evidence that insistence on a definite standard has had some effect in making manufacturers review the possibility of replacing the present hand cutting of lever gates by stamping. Dies have already been made up by one firm for this purpose and are being tried out.

4. *Road signs.*—The products of an indigenous firm in the Bombay Presidency, manufacturing road signs, were found to be below the required standards. The firm, when informed of the deviations, submitted a fresh sample to show what they could turn out. The sample on examination again revealed certain defects. These were pointed out to them and they were asked to effect necessary improvements.

5. *Paint, heat resisting, anti-corrosive, black.*—An officer of a local Government intimated that he had been using an imported brand of paint possessing heat resisting and anti-corrosive properties for smoke boxes of boilers and chimney stacks. On the advice of this Department, an indigenous product was tried and found to be suitable.

6. *Lanterns.*—An officer had been using storm proof lanterns of German make. Indian made lanterns on the Indian Stores Department contract, which are extensively used by the principal indentors including Railways in India, were offered to him. He maintained that these lanterns when used previously had not been found to be storm proof. Comparative tests on both Indian made and imported lanterns were carried out under the severest air conditions and it was observed that the indigenous product was not inferior to the lantern of foreign make. The test results were brought to the notice of the officer concerned, and he agreed to use Indian made lanterns in future.

7. *White rubber-proofed coats and khaki canvas coats and capes, chemically proofed.*—The question of supplying a using department with waterproof garments of indigenous manufacture, which could stand heavy monsoon rains, originally taken up in 1932-33, was actively pursued during the year under report. A waterproofing firm in Calcutta, which used to do their proofing by the chemical method and which had by this time made sufficient progress with the vulcanising (rubber proofing) method of waterproofing fabrics, submitted samples which were approved by the using department and a trial order for 6 coats was placed with the firm. The experiment having proved a success, 619 garments were ordered in May 1934 of the total value of Rs. 4,488. The foundation fabric is of Indian manufacture and the rubber is also Indian. Thus a new industry has been helped in the initial stages and it may be hoped that with further experience the manufacturers will be able to compete successfully for all the waterproof garments which the Department purchases.

8. *Leather goods.*—The general standard of leather goods purchased by the Department and manufactured in Cawnpore has only been reached after continuous pressure and assistance by this Department. Contractors have been encouraged to improve manufacture both as regards workmanship and finish.

68. *Exhibition of Indian manufactures.*—Mention has already been made in the previous reports of the arrangements made in the Imperial Secretariat Buildings, New Delhi, for exhibiting articles of indigenous manufacture. During the year the following additional exhibits of articles wholly or partly manufactured in India were received from manufacturing concerns in India :—

Soaps, paints, colours and varnishes, metal polishes, acids, oils, coal tar, sulphate of ammonia, napthalene, push and release valve, and glassware.

69. *Important purchases of articles of Indian manufacture.*—The Department continued its efforts to substitute, wherever possible, and without sacrifice of efficiency or economy, articles of indigenous manufacture for the imported products. The following is a list of the more important contracts placed during the year for products which were wholly or partially produced or manufactured in India :—

Textiles.

Drills	9,52,000
Cotton waste	6,57,000
Blankets, woollen	6,53,000
Sheets, ground	5,92,000
Pugree cloth	4,52,000

Textiles—contd.

Jackets, cardigan, jerseys, woollen, banians, vests, etc. ..	4,21,000
Tents and tent components	3,51,000
Serges	3,17,000
Socks, stockings, hosetops, etc.	3,15,000
Cloth, drab mixture, and greatcoat cloth	2,62,000
Rugs, horse	1,85,000
Flannel	1,63,000
Paulins, flax and jute	1,50,000
Sheets, barrack and hospital	1,37,000
Wool cotton, absorbent	1,36,000
Durries, cotton	1,36,000
Bags, postal	1,04,000
Twill, cotton	99,000
Yarn, cotton and woollen	96,000
Hessians and gunnies	91,000
Boots and shoes	89,000
Ropes, head and heel	88,000
Garments	87,000
Dhoti cloth, dosuti cloth, long cloth and cloth, silicia ..	79,000
Putties, cotton and woollen	74,000
Capes and coats, waterproof	71,000
Blanketting cloth	71,000
Drawers	61,000
Greatcoats, overcoats and coats, blanket	60,000
Flannelette	60,000
Tape and webbing	48,000
Thread sewing	43,000
Hides, skins and leather articles	42,000
Bandage cloth	40,000
Bunting and flags	31,000
Towels and towelling cloth	29,000
Cloth, cotton, red, yellow, etc.	29,000
Gauze, absorbent	28,000
Carpets and durries, woollen	26,000
Cloths, jaconet, dungree, etc.	25,000
Twine, jute, hemp, etc.	23,000
Accoutrements, Police, belts, bags kit, etc.	18,000
Baize cloth and Oxford cloth	15,000
Wool, stuffing, yarn worsted packing, trimmings, etc. ..	15,000
Cordages, cotton	15,000
Dusters, handkerchiefs, cloth table, etc.	15,000
Covers and nets, tank, mule	15,000
Kullahs, lungies and fringes	14,000
Coir and coir made articles	14,000
Canvas, jute	14,000
Cases, pillow, mattresses	13,000
Shorts, shirts, blouses, etc.	13,000
Cordages, manilla	13,000

Textiles—concld.

Caps, woollen	12,000
Duck, cotton	10,000
Nets and netting, mosquito	10,000

Engineering and Miscellaneous.

Cement	17,12,000
Paints, enamels, varnishes, including dry pigments	14,49,000
Road dressing materials	13,88,000
Conductors, copper	10,70,000
Mild steel sections	10,67,000
Oil, axle	10,49,000
Oil, kerosene	6,66,000
Track fittings	4,45,000
Cables and flexible cords, electric	3,87,000
Pig iron	3,27,000
Oil, castor	3,10,000
Fans, electric	3,06,000
Petrol	2,88,000
Pipes and specials, C. I.	2,83,000
Insulators	2,53,000
Sheets, M. S.	2,27,000
Sea and river craft	2,16,000
Coal, steam and rubble	2,06,000
Oil linseed, raw and double boiled	1,89,000
Gas, oxygen	1,53,000
Charpoys, G. I. pipe	1,35,000
Bricks, fire and clay, fire	1,28,000
Turpentine	1,13,000
Creosote	1,00,000
Timber	75,000
Oils, lubricating	63,000
Acids	63,000
Fittings, carriage and wagon	54,000
Tools, track	51,000
Tanks, steel and staging	50,000
Soaps	49,000
Sheets, asbestos, cement	46,000
Point rodding	46,000
Vacuum Brake fittings	46,000
Crane girders, 60 tons	42,000
Locks	41,000
Cells, component parts of	40,000
Greases	29,000
Oil, gas making	29,000
Trucks, tramway	27,000
Turntable, engine	25,000
Bolts and nuts	24,000
Cooking ranges	23,000
Structural work	23,000

Engineering and Miscellaneous—contd.

Gas, acetylene	22,000
Oil, fuel	22,000
Disinfectants	21,000
Couplers, inter-vehicle, and spares	21,000
Fittings, G. I. brass and gunmetal, for water and steam ..	20,000
Coal tar	17,000
Graphite	15,000
Components of coaching underframes	15,000
Floodlight masts and towers	14,000
Break beams	13,000
Pipes, S. W.	13,000
Scales and weights	12,000
Electrodes	12,000
Trainlight equipment	12,000
Pipes, earthenware	11,000
Spirit methylated, denatured	11,000
Polish metal	11,000
Piston rods and cylinders	10,000
Girder for wagon ferry pontoon	10,000
Ventilators for train carriages	10,000

70. *Certification of material for exemption of Customs duty.*—The Matallurgical Inspector, Tatanagar, continued the work of certification in connection with the importation, free of duty, of certain items of materials required by the manufacturers located in his area. He certified during the year 3,568 tons of electrolytic copper rods imported by the Indian Cable Co. and 4,473 tons of steel rod required for the manufacture of wires and wire nails and imported by the Indian Steel Wire Products Ltd.

The Karachi Inspection Circle, which has also been entrusted with a similar duty, issued exemption certificates for 247 tons of wire rods imported by Messrs. Devidas Jethanand and Co., Karachi, in connection with the manufacture of wire nails, screws, etc.

The Controller of Inspection, Bombay, issued similar certificates during the year for 274 tons of wire rods imported by Messrs. The Indian Hume Pipe Co. Ltd., for the manufacture of wire and wire nails.

CHAPTER X.

FINANCE.

71. *Statistics of revenue and expenditure.*—In appendix XVIII will b found a financial statement shewing the receipts and charges of the Depart ment for the year 1934-35, and similar information for each of the precedin three years.

The credit side of the statement includes recoveries from non-Governmen Departments as well as those from Commercial Departments and undertaking of the Central Government and from Provincial Governments. It also include a *pro forma* credit, calculated at schedule rates, for work done on behalf o the non-commercial civil departments of the Central Government agains whom no charges are made.

On the debit side the figures shewn in the statement include all direct expenditure as well as items of indirect charges usually incorporated in the Profit and Loss Accounts of commercial undertakings.

The total direct and indirect expenditure for the year 1934-35 amounted to Rs. 23,63,885, an increase of Rs. 94,210 over the corresponding figure for the preceding year. This increase is due chiefly to the normal growth of expenditure on account of annual increments and partly to increased expenditure on inspection of materials in the country of manufacture, and to the employment of additional staff necessitated by a large increase in the volume of work handled by the Department during the year under review.

On the credit side the account shews an increase of Rs. 3,26,415, the total earnings during 1934-35 amounting to Rs. 15,23,906 against Rs. 11,97,491 for the preceding year. It is satisfactory to note that this substantial improvement is shown by all sections of the Department. The recoveries on account of purchase and inspection of stores against indents placed with the Depart ment advanced by Rs. 1,62,039 while the fees earned on stores inspected on behalf of other authorities and on tests and analyses carried out at the Gov ernment Test House at Alipore and the Metallurgical Inspectorate at Tatanaga exceeded the corresponding figures of the previous year by Rs. 1,59,152.

After covering the excess of Rs. 94,210 on the expenditure side, there wa a net improvement of Rs. 2,32,205 in the balance sheet of the Departmen for the year 1934-35 as compared with the year 1933-34.

SIMLA:
Dated the 20th August 1935.

J. S. PITKEATHLY,
Chief Controller of Stores,
Indian Stores Departmen

APPENDIX I.

(*Vide* paragraph 8.)

Hints for the guidance of authorities in India desirous of utilising the services of the Indian Stores Department.

Authorities for which the Indian Stores Department is permitted to act.—The Indian Stores Department is authorised to arrange for the purchase and inspection of stores on behalf of all Government Departments, Central as well as Provincial, State and Company Railways, Indian States and *quasi*-public bodies in India. It must be understood, however, that the Department acts merely as an agent in this connection and is not in any way responsible as principal either to the seller or to the buyer.

2. The services of the Department can be utilised for the inspection of stores, orders for which are placed by the consuming authorities direct, and for the testing and analysis of materials at the Government Test House and the Metallurgical Inspectorate, by Government departments, Company Railways, *quasi*-public bodies and Indian States, as well as by private parties.

3. *Classes of stores which can be purchased through the Indian Stores Department.*—The Indian Stores Department undertakes to arrange for the supply of all classes of stores except :—

(1) Foodstuffs and forage.

(2) Lethal stores.

(3) Stationery stores, printing stores and office machinery and appliances as detailed in the appendix to the Rules for the Supply of Printing and Stationery Stores for the Public Service.

(4) Medical stores.

(5) Mathematical instruments, which under standing orders are to be obtained from the Mathematical Instrument Office.

(6) Scientific instruments and accessories of a special character which involve as departure from standard.

(7) Straw, firewood and charcoal.

(8) Road metal, bricks, stone, marble and similar building materials, lime, sand and chalk.

(9) Indian made wooden and cane furniture, country carts and boats, ordinary packing cases, hand carts, trucks and trolleys which can be satisfactorily and economically obtained from local sources.

4. *Organisation of the Purchase Branch.*—Besides a purchase branch in the Headquarters office, divided into a number of sections dealing with different classes of stores, which is located at Simla from the middle of April to the middle of October and at the Imperial Secretariat Buildings, New Delhi, during the rest of the year, Provincial Purchase Circles are located at Calcutta, Bombay and Karachi. The Postal and Telegraphic addresses of these Circles and their scope of operations are given below :—

Postal Address.	*Telegraphic Address.*	*Territory within which allowed to operate.* *
Controller of Purchase, Calcutta Circle, Indian Stores Department, 6, Esplanade East, Calcutta.	Storchase, Calcutta ..	Bengal, United Provinces, Bihar and Orissa, Madras Presidency (Northern parts) and Burma.
Controller of Purchase, Bombay Circle, Indian Stores Department, Hararwalla Building, Wittet Road, Ballard Estate, Bombay.	Storchase, Bombay ..	Bombay Presidency (except Sind), the Central Provinces, the Madras Presidency (Southern parts) and Cawnpore (for textiles only).
Controller of Purchase, Karachi Cricle, Indian Stores Department, Satsaroop Building, Karachi.	Storchase, Karachi ..	Sind, Baluchistan, the Punjab and Cawnpore (for textiles only).

*(This has reference to the market in which the order is placed and not to the headquarters of the indenting officer).

5. Indents may be placed with the Provincial Controllers of Purchase at Calcutta, Bombay and Karachi, up to the limits detailed below. Indents exceeding these limits should be placed on the Headquarters office.

I. *Controller of Purchase, Calcutta Circle.—*

(1) For Jute goods up to Rs. 50,000.

(2) For other stores up to Rs. 15,000.

II. *Controller of Purchase, Bombay Circle.—*

(1) For cotton yarn for the Jail Department, Bombay, up to Rs. 25,000.

(2) For the requirements of the Royal Indian Navy, up to Rs. 15,000.

(3) For other stores up to Rs. 15,000, subject to the condition that no single item or interconnected items, exceed Rs. 5,000.

III. *Controller of Purchase, Karachi Circle.—*

(1) For mild steel sections for which orders have to be placed elsewhere than at Calcutta or Bombay, up to Rs. 15,000.

(2) For other stores—upto Rs. 15,000, subject to the condition that no single item, or interconnected items, exceed Rs. 5,000.

The above limits do not apply to requisitions against rate contracts arranged by the Headquarters office (or against running contracts on which the Provincial Controllers are permitted to operate).

6. *Instructions for the preparation of indents.*—Indents should be submitted on the standard Indian Stores Department Indent form (I. S. D.-28) supplies of which can be obtained on application from the office of the Chief Controller of Stores or from any of the Purchase Circles at Calcutta, Bombay and Karachi, or inspectorates at Lahore, Cawnpore, Madras and Tatanagar. The items indented for should be described in sufficient detail and any additional information should be given which will assist in the disposal of the indent, *e.g.*, references to catalogues or to previous supplies. The purpose for which stores are required should always be stated and reference to previous supply should be made when duplicates are required.

7. As different classes of stores are dealt with in different sections of the Purchase Branch of the Indian Stores Department, separate indents should, as far as practicable, be prepared for stores falling under various classes, namely :—

(1) Power plant and spares, sewage plant, radio and wireless stores, air-route lighting equipment, train lighting equipment, disinfectors, capstans, fairleads, lifts, refuse destructors, salt crushing and screening plant, locomotives, welding plant, oxy-acetylene plant, motors and punkha motor sets.

(2) Pumping plant, boring plant, steam, gas and oil engines, ice plant and refrigerators, excavators, fire engines, road rollers and spares, chlorinating and water-softening plant.

(3) Engineering plant and machinery, motor vehicles, tractors, workshop equipment including spares, agricultural machinery, textile machinery, sea and river craft, testing machines, wagons, trucks, nightsoil, refuse and sanitary carts.

(4) Electrical stores (including transmission and distribution materials), electrodes, measuring instruments, telephone and telegraph equipment and electric fittings for railway carriages.

(5) Structural steel work of all kinds, steel axles, tyres, wheels, girder spans, tanks and stagings, tin tents, shelving racks, gates for canal-regulators, wire ropes, and target apparatus, component parts of underframes and wagons, screw couplings, buffers and buffer parts.

(6) Water supply stores, including pipes (all kinds), hose (canvas and rubber), water meters, sluice valves and pig lead.

(7) Fire extinguishers, cranes, boilers and boiler tubes, superheater flues, weighing machines, belting, condensing and distilling plant, lifts, cranes, ball and roller bearings, signalling apparatus and lighthouse equipment.

(8) Permanent way materials such as rails, sleepers, points and crossings, draw gear, track fittings, and equipment, point rodding, signal mild wire ropes, non-ferrous metals, steel furniture and office equipment, metals such as pig iron, zinc ingots, antimony, wire gauze, wires of all kinds other than electrical, wire ropes and shelving racks.

(9) Steel sections, steel sheet piling, metal sheets of all kinds, steel door and window frames and fittings, asbestos cement sheets, bearing metals, bolts and nuts, nails and screws.

(10) Oils and greases, petrol, tallow, candles, creosote, road-dressing materials' chemicals, alumina ferric, soaps, explosives and disinfectants.

(11) Paints and painters' materials, including linseed oils, turpentine and methylated spirits, gold leaf, paint remover, metal polish, gases, graphite (foundry) and calcium carbide.

(12) Cement, timber, coal, coke, hand tools, vacuum brake fittings, carriage body, metallic and rubber fittings, brushes and crucibles.

(13) Miscellaneous engineering and hardware stores : rubber goods including tyres and tubes, glass sheets, glassware, enamelware, oil lamps and lampware, crockery, cutlery, locks, safes, chests, cooking ranges, buttons, badges, clocks and watches, buckets, bicycles, steel furniture, firebricks and fire clay, handcuffs, enamel sign boards, scales and weights and Posts and Telegraphs requirements, glass paper, emery cloth, packing and jointing materials, laboratory equipment, photographic materials, etc.

(14) Cotton materials.

(15) Woollen materials.

(16) Garments and all made-up articles of cotton and wool.

(17) Jute, hemp, flax and miscellaneous textiles including cotton waste.

(18) Leather goods.

Each separate indent should show items of a like description grouped together.

8. Indents for the purchase of plant and machinery should provide the fullest information possible and particular care should be taken to see that all peculiar local or special conditions, which might involve departures from normal standards, are mentioned.

9. Indents for spare parts should be compiled from maker's spare parts catalogues where available and care should be taken to quote the correct symbol, number and nomenclature, or code word applicable to the particular type of plant. The maker's number of the machine should also be stated. Failing this, the date and source of original supply should be given. In dealing with demands of this kind drawings are frequently essential.

10. Sufficient time should be allowed to the department for arranging the purchase of stores. Additional expenditure is frequently involved in arranging purchases at short notice.

A specific date should be stated in the indents by which the stores are required, and expressions such as 'immediately', 'as early as possible', or 'urgent' should be avoided. These expressions are constantly used, but they defeat their own object by making it impossible for the Indian Stores Department to differentiate between the degree of urgency of the various indents.

Indenting officers are also requested to spread the demands made on the Indian Stores Department evenly over the whole year as far as possible. The concentration of a large number of orders towards the close of the year not only tends to entail extra expenditure and inconvenience but makes for difficulties in the efficient disposal of the business connected with the purchase and inspection of stores.

11. Indentors should clearly state whether the goods are to be booked by goods or passenger train, whether at ' Owners ' or at ' Railway ' Risk and whether they are to be insured on rail.

12. It is desirable that wherever possible the Stores Department should be made aware of the approximate amount which the indentor expects to pay for the stores indented for. To this end against each item the last price paid should be entered in the ' estimated cost ' column in the indent form. The estimated cost of freight and the Indian Stores Department fees should be added to the total. If information as to the latest price paid is not available a rough estimate should be given.

13. In the case of authorities with whom adjustments are made through the Exchange account the appropriate certificate of availability of funds on page 4 of the indent form should be completed on all indents, and in the case of others the treasury receipt or bank deposit receipt must accompany or follow the indents, *vide* paragraph 18.

14. *Disposal of indents.*—The Indian Stores Department holds no stocks of stores of any kind. On receipt of an indent supply is arranged, either by placing a separate order for the stores demanded or by combining the demand with others for compliance under a general contract, or, where convenient, under a ' running ' or ' rate ' contract. Copies of all orders are endorsed to indenting officers and consignees (if other than indenting officers).

15. In the event of the quotation which it is proposed to accept being considerably higher than the amount estimated by the indentor, a reference is made to him before the order is actually placed. In the absence of any special instructions on this point, the practice is to refer to the indentor if his estimate of the total cost of the stores demanded in any one indent is likely to be exceeded by 10 per cent. or Rs. 10,000, excepting when the total cost is not more than Rs. 1,000, in which case no reference to the indentor is made.

16. A list of items for which Rate and Running contracts were entered into during the year 1934-35 is given in Appendix IX. A list of the contracts in force, or copies for those in which an intending indentor may be interested, will be furnished on application. Arrangements can be made to enable Government officers, intending to avail themselves of the facilities, to requisition against such contracts direct from firms.

17. *Adjustment of accounts.*—Debits for the cost of stores purchased through the Indian Stores Department by Government officers and for the departmental fees for purchase (and inspection) levied by the Indian Stores Department are raised by the Audit Officer, Indian Stores Department, against the Accounts Officer of the consignee in the account of the month in which the suppliers' bills are paid, and exchange accounts showing all such transactions are sent by the Audit Officer, Indian Stores Department, to the accounts officer concerned, in the beginning of the second month after that to which the transactions pertain. Advance intimations of payments are sent to the consignees by the Audit Officer, Indian Stores Department, after a week of the date of payment, to keep the former informed of their liabilities and expenditure, in respect of bills paid direct on certification by Inspectorates or in cases in which amounts passed by consignees are altered in audit, or when payment is made in a financial year subsequent to that in which the bill is passed by the consignee.

18. In the case of authorities against whom book debits cannot be raised, *e.g., quasi*-public bodies and Indian States, the indenting officers have the option either—

(*a*) of placing a sum equivalent to the estimated cost of the stores, *plus* the departmental fees payable for the services of the Indian Stores Department, to the credit of the Audit Officer, Indian Stores Department, in a Government treasury, forwarding the treasury receipt with the indent ; or

(*b*) of depositing in a branch of the Imperial Bank of India in the name of the Audit Officer, Indian Stores Department, a sum of money sufficient to cover the estimated cost of the stores, *plus* departmental fees with instructions to the bank that the sum should be strictly reserved for the purpose of meeting demands from the Audit Officer, Indian Stores Department, which should be complied with by the transfer of the amount to the Government account. The deposit receipt granted by the Bank should be forwarded with the indent.

The latter alternative has been introduced to avoid large sums of money being locked up without interest.

19. *Inspection, Testing and Chemical Analyses.*—The inspection and testing staff of the Indian Stores Department is located at places noted below :—

Postal Address.	Telegraphic Address.
The Controller of Inspection, Calcutta Circle, Indian Stores Department, 6, Esplanade East, Calcutta.	Storespect Calcutta.
The Controller of Inspection, Bombay Circle, Indian Stores Department, Hararwala Building, Wittet Road, Ballard Estate, Bombay.	Storespect Bombay.
The Inspector-in-Charge, Karachi Circle, Indian Stores Department, Satsaroop Building, Victoria Road, Karachi.	Storespect Karachi.
The Inspector-in-Charge, Upper India Circle, Indian Stores Department, Lahore.	Storespect Lahore.
The Inspector-in-Charge, Cawnpore Inspection Branch, Indian Stores Department, 254, Nawabganj, Cawnpore.	Storespect Cawnpore.
The Inspector-in-Charge, Madras Branch, Indian Stores Department, Old High Court Buildings, Madras.	Storespect Madras.
The Metallurgical Inspector, Indian Stores Department, Burma Mines, Tatanagar.	Metalspect Tatanagar.
The Superintendent, Government Test House, 13, Judge's Court Road, Alipore, Calcutta.	Testhouse Calcutta.

20. These organisations undertake the analyses, tests and investigations of chemicals and other stores, and inspection of material purchased by the Indian Stores Department, or by any other purchasing authorities. Where necessary, inspection in the country of origin is also arranged through the Director General, India Store Department, London. No additional charges are levied by the Department for the cost of such inspection.

21. Requests for inspection of purchases not made through the Indian Stores Department should be addressed to the nearest Inspectorate, or to the Chief Controller of Stores, Indian Stores Department, Inspection Section, on form I. S. D.-40, copies of which can be obtained from him or any Inspectorate, free of charge. Requests for tests or analyses should be addressed to the Superintendent, Government Test House, Alipore, Calcutta, or the Metallurgical Inspector, Tatanagar, as the case may be.

22. *Complaints.*—In the event of serious complaints in regard to quality or price of stores, or delay in supply, full details should be furnished to the Chief Controller of Stores, Indian Stores Department, when they will be carefully investigated. Minor complaints should, however, be referred to the supplying firms direct, and, if necessary, a copy of the complaint endorsed to the inspecting officer concerned in cases where the stores have been inspected by the Indian Stores Department. Complaints regarding adjustment of accounts should be addressed to the Audit Officer, Indian Stores Department, New Delhi. If a matter is not satisfactorily settled, it should be referred to the Chief Controller of Stores.

23. Before making complaints regarding delay in supply indentors are requested to take into consideration the time required for inspection and for transit from place of supply to destination. Complaints are not uncommon in regard to which this consideration has been entirely overlooked. Similarly before complaining of delay in raising debits, indentors are asked to ensure that the bills have not been delayed by the consignees, it having been found that this is a frequent cause of delay in such cases.

24. All complaints should be made as promptly as possible, as delay may prejudice the chances of obtaining redress, particularly if arbitration or legal proceedings are involved.

25. *Rejections and disposal of rejected stores.*—In the case of orders placed by the Indian Stores Department, this Department is the contracting party, and the final rejection of stores lies within its competence alone. Therefore, it is not possible for an indenting officer or consignee to reject stores which have been accepted by the Department. In cases in which an indenting officer considers that grounds for the rejection of such stores exist, a full report should be forwarded immediately to the Indian Stores Department Inspectorate concerned, and the goods complained of should be carefully stored to avoid loss or deterioration, pending investigation by the Department and the issue of final instructions as to their disposal. Should it be decided that the stores should be rejected, intimation to this effect will be furnished immediately to the contractor by the Indian Stores Department, and he will be informed that the stores lie at his risk from the date of such rejection, and that if not removed within a fortnight of rejection the purchaser will have the right to dispose of the stores as he thinks fit at the contractor's risk and on his account.

If supplies against an order not exceeding Rs. 5,000 in value are received in a damaged or defective condition and the consignee proposes to accept them at a reduced price to which the supplier is agreeable, he may do so without reference to the Purchase Officer. An intimation of the reduction made should, however, be given to the Purchase and Inspecting Officers concerned for information and record in their books.

If the value of the order exceeds Rs. 5,000, the final decision to assess the reduced price for defective or damaged stores will rest with the Purchase Officer and all such cases should be referred to that Officer.

All cases in which the supplier and the consignee are unable to come to an agreement will, of course, be referred to the Purchase Officer, irrespective of the value of the order.

26. Cases occasionally occur in which stores are despatched to their destination after merely a visual examination at the contractor's premises, works or godowns, on the understanding that their final acceptance or rejection shall depend on the results of the tests carried out at the Government Test House. In such cases if the stores are rejected, the contractor will be informed at once, and the stores will lie at the consignee's depôt at the contractor's risk from the date of such rejection, and, if not removed within a fortnight of rejection, the consignee will have the right to dispose of them as he thinks fit, at the contractor's risk and on his account.

27. Similarly, stores, which are rejected by the inspecting officer appointed by the Indian Stores Department, after delivery, under the terms of the contract for inspection at the consignee's Depôt, will lie at the consignee's depôt at the contractor's risk from the date of such rejection, and if not removed within a fortnight of rejection, the consignee will have the right to dispose of them as he thinks fit, at the contractor's risk and on his account.

28. Stores rejected in the circumstances indicated above and not removed by the contractor within the period allowed for such removal should be disposed of by the consignee, either by return to the contractor or in such other manner as he considers most suited to the circumstances in each case.

29. The expiry of the period allowed for removal brings into operation the consignee's (Bailee's) right to sell or otherwise dispose of the goods. His liabilities for negligence will, however, continue so long as the goods are in his custody. He cannot, for instance, leave the stores unprotected or in the open, exposed to sun and rain, and then disclaim responsibility for loss or damage arising out of such causes. He is expected to exercise such reasonable care of the goods as under the circumstances he would have exercised of his own.

30. It should be understood that the foregoing instructions apply only to stores which are purchased and inspected by the Indian Stores Department.

31. *Departmental charges.*—Under the orders of the Government of India the Indian Stores Department, levies a fee of 1 per cent. for purchase and 1 per cent. for inspection of the total cost of orders placed on behalf of all Departments except the non-commercial civil departments of the Central Government.

The fee of 1 per cent. for inspection includes all sampling and testing before the contract is concluded, and also, where necessary, sampling and testing during the currency of the contract. These charges are adjusted by the Audit Officer, Indian Stores Department, with the cost of stores.

32. The fees for analyses and tests of chemicals and other stores, and for inspection of purchase made by other purchasing authorities, carried out at the Government Test House, the Metallurgical Inspectorate or any other organisation under the Inspection branch of the Department, are given in detail in the schedules prescribed by the Government of India, Department of Industries and Labour, copies of which can be obtained from the Manager of Publications, Civil Lines, Delhi. Bills for these charges are prepared by the heads of inspection or testing organizations and forwarded to the parties concerned for acceptance and adjustment through exchange account in the case of authorities having exchange accounts and payment in cash, either direct or into the nearest Government treasury, in the case of other authorities and private concerns.

33. No charge is made for services rendered by any branch of the Department (including the Government Test House and Metallurgical Inspectorate) to non-commercial civil departments of the Central Government.

APPENDIX II.

ORGANIZATION OF THE INDIAN STORES DEPARTMENT AS IT STOOD ON THE 31st MARCH 1935.

(*Vide* paragraph 10 of the Report.)

CHIEF CONTROLLER OF STORES.

- **PURCHASE.**
  - TEXTILES AND LEATHER.
    - Deputy Director of Purchase.
    - Assistant Director of Purchase.
    - Assistant Controller of Purchase.
  - ENGINEERING.
    - Deputy Director of Purchase.
    - Assistant Controller of Purchase.
  - HARDWARE AND MISCELLANEOUS.
    - Deputy Director of Purchase.
    - Assistant Director of Purchase.
  - PROVINCIAL.
    - CALCUTTA.
      - Controller of Purchase.
      - Assistant Controllers of Purchase.
        - Head Clerk.
        - Stenographer.
        - 30 Clerks.
        - 2 Duftries.
        - 12 Peons.
        - Chowkidar.
    - BOMBAY.
      - Controller of Purchase.
      - Assistant Controller of Purchase.
        - Head Clerk.
        - Stenographer.
        - 19 Clerks.
        - Duftry.
        - 8 Peons.
    - KARACHI.
      - Controller of Purchase.
        - Head Clerk.
        - Stenographer.
        - 14 Clerks.
        - Duftry.
        - 7 Peons.
        - Chowkidar.
- **ADMINISTRATION AND INTELLIGENCE.**
  - Deputy Director of Administration and Intelligence.
  - Assistant Director of Administration and Intelligence.
    - 5 Superintendents.
    - 1 Examiner.
    - 147 Assistants and clerks.
    - 5 Stenographers.
    - 4 Record Sorters
    - 13 Duftries.
    - Jemadar.
    - 39 Peons.
    - 3 Farashes.
- **INSPECTION.**
  - Deputy Director of Inspection.
  - Assistant Director of Inspection.
  - 2 Assistant Engineers (Inspection).
  - Head Draftsman.
  - 5 Draftsmen.
  - Ferro-typer.
  - PROVINCIAL.
    - CALCUTTA INSPECTION CIRCLE.
      - Controller of Inspection.
      - 2 Assistant Controllers of Inspection.
      - 14 Assistant Engineers (Inspection) and Inspectors of Stores.
      - Personal Assistant to the Controller of Inspection.
        - 15 Examiners.
          - Head Clerk.
          - Stenographer.
          - 46 Clerks.
          - 2 Checkers.
          - Draftsman.
          - 2 Duftries.
          - 17 Peons.
          - Chowkidar.
    - GOVERNMENT TEST HOUSE, ALIPORE.
      - Superintendent, Government Test House.
        - Physicist.
        - Assistant Engineer.
          - 9 Physical Assistants.
          - Foreman.
        - Head Clerk.
        - Stenographer.
        - Accountant.
        - 15 Clerks.
        - 2 Storekeepers.
        - 3 Laboratory Operators.
        - 5 Mistries.
        - 3 Fitters.
        - 13 Laboratory Bearers
        - 12 Laboratory Khalasies.
        - 2 Duftries.
        - 10 Peons.
        - Chowkidar.
        - Mali.
        - Chemist.
        - Assistant Chemist.
          - 19 Chemical Assistants.
        - Research Branch.
          - Chemical Asisistant.
          - Physical Asstant.
            - Clerk.
            - Laboratory Bearer.
            - Peon.
    - METALLURGICAL INSPECTORATE.
      - Metallurgical Inspector.
        - 2 Assistant Metallurgical Inspectors.
          - Physical.
            - 4 Assistant Engineers (Inspection).
              - 7 Examiners.
          - Head Clerk.
          - Accountant.
          - Stenographer.
          - 10 Clerks.
          - 2 Mistries.
          - Head Laboratory Bearer.
          - Laboratory Bearer.
          - Head Peon.
          - 7 Peons.
          - Mali.
          - Chemical.
            - 5 Chemical Assistants.
    - MADRAS INSPECTION BRANCH.
      - Inspector-in-Charge.
        - 3 Clerks.
        - Duftry.
        - 2 Peons.
    - BOMBAY INSPECTION CIRCLE.
      - Controller of Inspection.
        - 6 Assistant Engineers (Inspection), and Inspector of Stores.
        - Personal Assistant to the Controller of Inspection.
          - Examiners.
            - Head Clerk.
            - Stenographer.
            - 23 Clerks.
            - Draftsman.
            - Laboratory Bearer.
            - 2 Daftries.
            - 10 Peons.
            - Chowkidar.
            - Farash.
    - UPPER INDIA INSPECTION CIRCLE.
      - Inspector-in-Charge.
        - Assistant Engineer (Inspection).
          - 2 Examiners.
            - Head Clerk.
            - Stenographer.
            - 6 Clerks.
            - Duftry.
            - 4 Peons.
            - Farash
    - CAWNPORE INSPECTION BRANCH.
      - Inspector-in-Charge.
        - 3 Examiners.
          - 6 Clerks.
          - Duftry.
          - 4 Peons.
          - Chowkidar.
    - KARACHI INSPECTION CIRCLE.
      - Inspector-in-Charge.
        - 3 Examiners.
          - Head Clerk.
          - Stenographer.
          - 14 Clerks.
          - Duftry.
          - 7 Peons.
          - Mali.
- **INDUSTRIAL INTELLIGENCE AND RESEARCH BUREAU.**
  - Director.
  - Assistant Director.
    - Superintendent.
    - 2 Technical Assistants.
    - 9 Assistants and Clerks.
    - 2 Stenographers.
    - Duftry.
    - Daffadar.
    - 4 Peons.

Appointments held in abeyance under the orders of the Government of India but not formally abolished have been excluded.

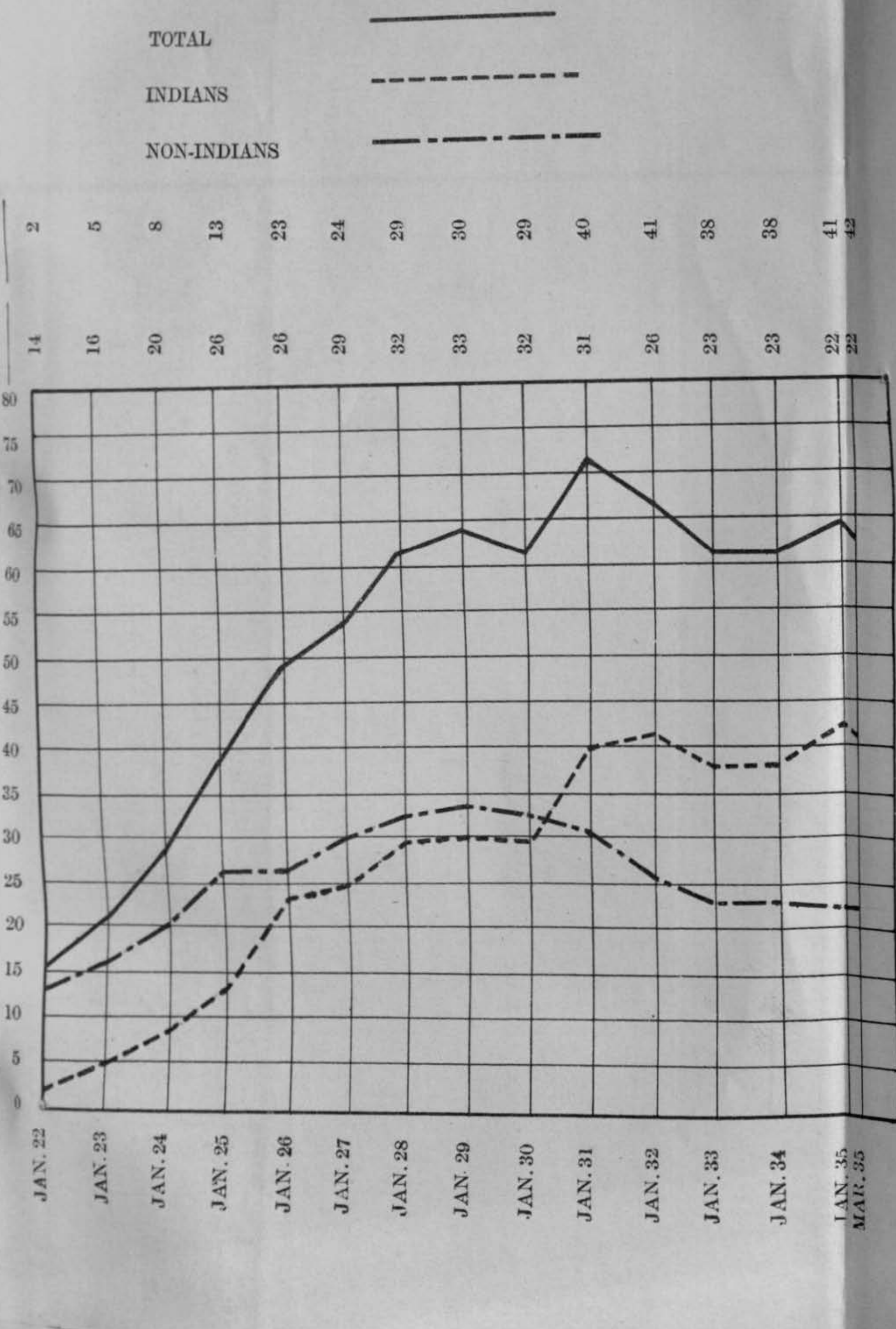
APPENDIX III.

INDIAN STORES DEPARTMENT.

GAZETTED STAFF.

Up to 31st March 1935.

(Vide *paragraph 12 of the Report.*)



APPENDIX IV.

Statement showing details of the communal composition of the staff employed in the Indian Stores Department.

(*Vide* paragraph 14 of the Report.)

ars.	Recruitment during 1934. Hindus.	Mohammedans.	Sikhs.	Indian Christians.	Anglo-Indians.	Other Indian communities.	Total Indians.	Europeans.	Total.
r.									
res	..	..	..	..	..	..	..	..	..
itelligence	..	..	..	..	..	..	..	..	..
.. ..	1	..	..	..	..	..	1	..	1
.. ..	..	..	1	..	1	1	3	—1	2
e and Research	..	..	..	..	..	..	..	1	1
. ..	1	..	1	..	1	1	4	..	4
al Staff.									
s	..	1	..	..	..	..	1	..	1
ts and Physical	2	—1	..	..	..	..	1	..	1
aff (*a*) ..	1	1	..	..	..	..	2	..	2
staff (Technical ory fiitters, etc.).	1	1	..	..		..	2	..	2
al	4	2	..	..	..	..	6	..	6
taff.									
.. ..	11	9	..	1	..	1	22	..	22
)	9	9	..	1	..	..	19	..	19
al	20	18	..	2	..	1	41	..	41

ars.	Total on 31st December 1934. Hindus.	Mohammedans.	Sikhs.	Indian Christians.	Anglo-Indians.	Other Indian communities.	Total Indians.	Europeans.	Total.
r.									
res	..	..	..	..	..	..	..	1	1
itelligence	1	..	..	1	..	..	2	..	2
.. ..	7	1	..	1	..	..	9	4	13
.. ..	23	3	1	1	2	1	31	16	47
e and Research	..	..	..	..	..	..	..	1	1
. ..	31	4	1	3	2	1	42	22	64
al Staff.									
s	28	4	1	1	1	1	36	..	36
ts and Physical	31	1	..	..	..	..	32	..	32
aff (*a*) ..	6	2	1	..	..	..	9	..	9
staff (Technical ory fiitters, etc.).	13	2	..	..	..	..	15	..	15
al	78	9	2	1	1	1	92	..	92
taff.									
.. ..	108	26	7	2	3	1	147	..	147
)	153	34	5	13	2	2	209	..	209
al	261	60	12	15	5	3	356	..	356

ars.	Total on 31st December 1933. Hindus.	Mohammedans.	Sikhs.	Indian Christians.	Anglo-Indians.	Other Indian communities.	Total Indians.	Europeans.	Total.
r.									
res	..	..	..	..	..	..	..	1	1
itelligence	1	..	..	1	..	..	2	..	2
.. ..	6	1	..	1	..	..	8	4	12
.. ..	23	3	..	1	1	..	28	18	46
e and Research	..	..	..	..	..	..	..	..	..
. ..	30	4	..	3	1	..	38	23	61
al Staff.									
s	28	3	1	1	1	2	36	..	36
ts and Physical	29	2	..	..	..	..	31	..	31
aff (*a*) ..	5	2	1	..	1	..	9	..	9
staff (Technical ory fiitters, etc.).	12	1	..	..	..	..	13	..	13
al	74	8	2	1	2	2	89	..	89
taff.									
.. ..	105	23	8	2	4	..	142	..	142
)	147	31	7	12	2	2	201	..	201
al	252	54	15	14	6	2	343	..	343

(*a*) Previously included in clerical staff.

(*b*) Drawing Office staff has been excluded.

APPENDIX V.

Value of stores purchased and fees earned (vide *paragraphs 2, 16 and 20 of the Report*).

—		Year.	Calcutta.	Bombay.	Karachi.	Total Provincial Circles.	Headquarters.	Grand Total.
Value of Stores purchased.	Textiles	1931-32	4,07,095	1,50,997	28,103	5,86,195	1,00,28,783	1,06,14,978
		1932-33	4,58,992	2,50,455	11,452	7,20,899	71,91,256	79,12,155
		1933-34	6,19,356	2,09,971	17,796	8,47,123	77,08,238	85,55,361
		1934-35	6,92,390	2,34,489	24,326	9,51,205	86,34,152	95,85,357
	Engineering and Miscellaneous Stores	1931-32	19,08,802	11,89,315	10,57,096	41,55,213	2,12,29,815	2,53,85,028
		1932-33	22,07,781	12,54,104	8,56,025	43,17,910	2,08,60,838	2,51,78,748
		1933-34	24,13,675	10,45,749	8,68,968	43,28,392	2,31,10,382	2,74,38,774
		1934-35	43,14,777	12,63,019	10,81,268	66,59,064	3,13,91,830	3,80,50,894
	Total	1931-32	23,15,897	13,40,312	10,85,199	47,41,408	3,12,58,598	3,60,00,006
		1932-33	26,66,773	15,04,559	8,67,477	50,38,809	2,80,52,094	3,30,90,903
		1933-34	30,33,031	12,55,720	8,86,764	51,75,515	3,08,18,620	3,59,94,135
		1934-35	50,07,167	14,97,508	11,05,594	76,10,269	4,00,25,982	4,76,36,251
Fees earned		1931-32	23,159	13,403	10,862	47,424	3,12,586	3,60,010
		1932-33	26,669	15,046	8,675	50,400	2,80,540	3,30,940
		1933-34	30,334	12,557	8,882	51,773	3,08,227	3,60,000
		1934-35	50,072	14,975	11,061	76,108	4,00,329	4,76,437

APPENDIX VI.

Statement showing the value of stores purchased on behalf of various authorities utilizing the services of the Indian Stores Department during the year 1934-35 and three preceding years. (Vide *paragraphs 2 and 16 of the Report.*)

Serial No.	Organization.	Purchases made during 1934-35.			Total for the year.		
		Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1934-35.	1933-34.	1932-33.	1931-32.
	Central—Army.						
1	Quartermaster General in India (including M. T.).	..	5,33,514	5,33,514	5,14,754	7,23,077	23,16,378
2	Master General of Ordnance	50,50,170	55,114	51,05,284	46,47,432	43,69,556	69,24,472
3	Military Engineer Services	11,187	22,75,111	22,86,298	26,61,600	35,91,131	41,45,814
4	Royal Indian Navy ..	43.766	3,93,896	4,37,662	3,78,091	3,55,463	3,01,928
5	Royal Air Force ..	13,204	22,292	35,496	36,732	22,633	1,16,692
6	Other Military Authorities ..	1,97,548	10,903	2,08,451	9,405	7,383	18,204
	Total Central—Army ..	53,15,875	32,90,830	86,06,705	82,48,014	90,69,243	1,38,23,488
	Central—Civil (including minor Administrations).						
7	Government of India Secretariat and attached offices	32,942	35,815	68,757	31,290	34,939	45,252
8	Superintendent, Viceregal Estates	88	19,492	19,580	11,394	18,771	13,490
	Authorities subordinate to the Department of Industries and Labour.						
9	Indian Posts and Telegraphs Department	3,20,438	25,94,668	29,15,106	13,35,985	13,78,534	21,02,991
10	Printing and Stationery Department (India) ..	61,454	26,600	88,054	70,572	84,008	1,24,112
11	Central Public Works Department	53,782	9,41,966	9,95,748	3,73,219	3,76,396	4,42,966
12	Civil Aviation Department	1,011	71,632	72,643	35,920	44,747	7,567
13	Other authorities ..	3,941	36,564	40,505	28,579	12,993	24,880
	Total—Authorities subordinate to the Department of Industries and Labour	440,626	36,71,430	41,12,056	18,44,275	18,96,678	27,02,516
14	Authorities subordinate to the Commerce Department	6,619	2,84,557	2,91,176	1,33,926	10,19,421	1,49,734
	Authorities subordinate to the Finance Department.						
15	Northern India Salt Revenue.	8,343	1,76,184	1,84,527	1,63,909	2,33,920	96,912
16	Other authorities ..	5,193	48,485	1,13,678	77,561	59,791	72,403
	Total—Authorities subordinate to the Finance Department	73,536	2,24,669	2,98,205	2,41,470	2,93,711	1,69,315

Serial No.	Organization.	Purchases made during 1933-34. Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1934-35.	Total for the year. 1933-34.	1932-33.	1931-32.
	Authorities subordinate to the Department of Education, Health and Lands.						
17	Survey of India ..	36,660	6,674	43,334	23,564	36,895	41,168
18	Director-General, Indian Medical Service	..	914	914	1,76,572	1,88,363	2,15,462
19	Other authorities ..	18,538	1,32,830	1,51,368	49,990	66,212	33,034
	Total—Authorities subordinate to the Department of Education, Health and Lands ..	55,198	1,40,418	1,95,616	2,50,126	2,91,470	2,89,664
20	*Authorities subordinate to the Foreign and Political Department* ..	55,909	1,47,801	2,03,710	1,69,995	1,86,370	1,69,302
	Minor Local Administrations.						
21	Baluchistan Administration ..	40,415	32,593	73,008	69,371	68,311	50,007
22	Coorg Administration	3,111	321	3,432	10,170	8,078	6,326
23	Ajmer-Merwara Administration ..	16,847	14,795	31,642	19,438	5,538	6,943
24	Delhi Administration	15,928	3,571	19,499	20,474	18,475	27,386
25	Andamans Commission	28,860	3,51,349	3,80,209	1,65,438	1,88,617	1,92,777
	Total—Minor Local Administrations	1,05,161	4,02,629	5,07,790	2,84,891	2,89,019	2,83,439
	Total Central—Civil	7,70,079	49,26,811	56,96,890	29,67,467	40,30,379	38,22,712
	Railways—State-managed.						
26	North Western Railway	8,65,384	55,81,719	64,47,103	60,43,556	42,08,411	32,08,178
27	Eastern Bengal Railway	2,34,851	45,75,068	48,09,919	21,62,710	17,60,084	14,64,946
28	East Indian Railway	8,66,938	79,91,408	88,58,346	49,84,247	49,89,450	40,94,173
29	Great Indian Peninsula Railway ..	4,53,411	43,75,392	48,28,803	35,27,017	33,45,286	25,76,856
30	Burma Railways ..	76,087	3,26,144	4,02,231	3,73,836	3,77,937	4,59,066
31	Central Publicity Bureau (Indian State Railways)..	..	3,759	3,759	1,551	3,583	4,843
32	Railway Clearing Accounts Office ..	..	431	431	..	10	..
	Total—State-worked Railways ..	24,96,671	2,28,53,921	2,53,50,592	1,70,92,917	1,46,81,761	1,18,08,062

M38ISD

Serial No.	Organization.	Purchases made during 1933-34. Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1934-35.	Total for the year. 1933-34.	1932-33.	1931-32.
	Railways—Company-worked.						
33	Assam-Bengal Railway ..	6,526	80,727	87,253	61,359	43,884	51,621
34	Bombay, Baroda and Central India Railway ..	..	..	..	2,866	..	261
35	South Indian Railway	34,552	2,24,357	2,58,909	1,64,418	2,80,719	3,53,045
36	Bengal Nagpur Railway ..	4,471	38,166	42,637	31,233	12,740	5,756
37	Madras and Southern Mahratta Railway	..	2,26,537	2,26,537	1,20,307	1,17,572	3,68,898
38	Bengal and North-Western Railway	..	..	..	894	14,509	..
39	Calcutta Chord Railway	..	..	..	..	179	6,845
40	Indian Railway Conference Association	..	..	..	..	..	763
41	Bankura Damoodar Railway	..	9	9	..	..	..
	Total—Company-worked Railways	45,549	5,69,796	6,15,345	3,81,077	4,69,603	7,87,189
	Railways—worked by Indian States.						
42	Jodhpur Railway ..	541	4,67,498	4,68,039	53,048	68,421	8,095
43	H. E. H. The Nizam's State Railway ..	16,358	47,502	63,860	78,666	54,693	10,706
	Total—Railways worked by Indian States ..	16,899	5,15,000	5,31,899	1,31,714	1,23,114	18,801
	GRAND TOTAL—Railways ..	25,59,119	2,39,38,717	2,64,97,836	1,76,05,708	1,52,77,478	1,26,14,052
	PROVINCIAL. *Madras.*						
44	Public Works Department	1,142	4,02,709	4,03,851	3,05,911	3,37,691	2,95,222
45	Police Department	73,359	6,374	79,733	43,622	33,649	81,842
46	Jail Department	12,822	39,242	52,064	35,675	28,647	11,193
47	Other Departments	26,861	57,609	84,470	74,147	53,844	29,825
	Total—Madras ..	1,14,184	5,05,984	6,20,118	4,59,355	4,53,831	4,18,082
	Bombay.						
48	Public Works Department	6,872	6,91,814	6,98,686	6,03,451	6,68,596	13,10,767
49	Police Department	1,87,846	5,223	1,93,069	1,62,329	1,91,559	1,60,615
50	Prisons Department	18,966	54	19,020	30,829	1,53,800	1 24,055
51	Other Departments	22,059	33,067	55,126	47,902	66,507	54,850
	Total—Bombay ..	2,35,743	7,30,158	9,65,901	8,54,511	10,80,462	16,50,287

Serial No.	Organization.	Purchases made during 1934-35. Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1934-35.	Total for the year. 1933-34.	1932-33.	1931-32.
	PROVINCIAL—*contd.* *Bengal.*						
52	Public Works Department.	876	49,352	50,228	40,209	1,10,228	1,17,985
53	Police Department	202	2,458	2,660	4,727	7,363	1,66,820
54	Jail Department ..	69,084	3,926	73,010	1,22,062	1,39,307	57,441
55	Other Departments	23,222	12,635	35,857	43,060	29,310	21,403
	Total—Bengal ..	93,384	68,371	1,61,755	2,10,058	2,86,208	3,63,649
	United Provinces.						
56	Public Works Department.	95	1,19,253	1,19,348	91,076	1,23,378	1,58,431
57	Other Departments	1,215	15,240	16,455	26,061	7,803	5,906
	Total—United Provinces.	1,310	1,34,493	1,35,803	1,17,137	1,31,181	1,64,337
	Punjab.						
58	Public Works Department.	6,950	20,23,422	20,30,372	30,87,804	14,26,672	20,46,157
59	Other Departments	1,59,063	91,123	2,50,186	2,46,012	1,80,027	1,10,998
	Total—Punjab ..	1,66,013	21,14,545	22,80,558	33,33,816	16,06,699	21,57,155
	Bihar and Orissa.						
60	Public Works Department.	648	1,11,592	1,12,240	1,15,344	60,523	83,233
61	Other Departments	4,034	61,542	65,576	84,243	88,505	23,013
	Total—Bihar and Orissa.	4,682	1,73,134	1,77,816	1,99,587	1,49,028	1,06,246
	Burma.						
62	Public Works Department.	3,075	9,882	12,957	8,313	3,940	2,997
63	Police Department..	1,06,712	2,961	1,09,673	1,44,782	1,49,225	1,69,419
64	Jail Department ..	3,839	..	3,839	90,018	77,691	24,046
65	Other Departments	..	27	27	394	214	595
	Total—Burma ..	1,13,626	12,870	1,26,496	2,43,507	2,31,070	1,97,057
	Central Provinces.						
66	Public Works Department.	..	1,67,944	1,67,944	72,357	66,877	41,205
67	Other Departments	6,344	9,272	15,616	12,486	11,459	13,856
	Total—Central Provinces.	6,344	1,77,216	1,83,560	84,843	78,336	55,061

Serial No.	Organisation.	Purchases made during 1934-35.			Total for the year.		
		Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1934-35.	1933-34.	1932-33.	1931-32.
	PROVINCIAL—*concld.*						
	Assam.						
	Public Works Department	2,909	1,047	3,956	22,152	27,169	8,347
	Police Department	80,489	2,990	83,479	74,758	67,258	1,43,502
70	Jail Department ..	10,706	1,027	11,733	17,807	17,290	11,931
71	Other Departments	2,121	2,511	4,632	4,198	2,319	2,937
	Total—Assam ..	96,225	7,575	1,03,800	1,18,915	1,14,036	1,66,717
72	North-West Frontier Province ..	76,316	3,85,659	4,61,975	3,17,478	69 994	71,703
73	Provincial Unclassified Items ..	..	..	..	..	29,375	11,407
	Total—Provincial	9,07,827	43,09,955	52,17,782	59,39,207	42,30,220	53,61,701
	Indian States.						
74	Jaipur	..	1,99,809	1,99,809	59,658	28,820	1,02,857
75	Mysore	..	..	..	388	6,732	650
76	Bahawalpur ..	..	1,39,646	1,39,646	1,13,527	38,782	39,229
77	Hyderabad ..	..	2,913	2,913	3,803	1,732	4,813
78	Jamkhandi ..	..	164	164	258	2,976	3,332
79	Indore	..	7,723	7,723	16,044	81	1,185
80	Gwalior	..	3,357	3,357	4,918	14,288	4,954
81	Patiala	..	159	159	..	11	288
82	Jodhpur	134	45,911	46,045	37,469	8,608	35
83	Khairpur ..	286	26,737	27,023	38,227	13,938	..
84	Jind .. .	..	..	..	12	..	..
85	Sikkim	..	..	..	110	..	..
86	Barwani	33	..	33	..	..	..
87	Junagadh	6,598	..	6,598	..	..	..
88	Bharatpur	533	..	533	..	..	..
89	Nabha	..	84	84	..	..	..
90	Gangpur	..	143	143	..	..	..
91	Sundergarh.. ..	..	90	90	..	..	..
92	Alwar	..	997	997	..	..	..
	Total—Indian States.	7,584	4,27,733	4,35,317	2,74,414	1,15,968	1,57,343

Serial No.	Organization.	Purchases made during 1934-35. Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1934-35.	Total for the year. 1933-34.	1932-33.	1931-32.
	Quasi public bodies.						
93	City Board, Mussoorie.	420	1,10,882	1,11,302	31,499	34,830	1,28,513
94	Municipal Committee, Simla.	..	17,471	17,471	6,817	18,227	10,106
95	Municipal Committee, New Delhi.	744	2,78,186	2,78,930	1,01,112	83,106	..
96	Municipal Corporation, Karachi.	11,793	3,74,245	3,86,038	32,134	20,909	19,046
97	Municipal Corporation, Madras.	..	59,641	59,641	86,845	36,594	..
98	Other Municipalities and District Boards.	1,085	1,96,257	1,97,342	1,76,468	1,53,467	47,851
99	Port Commissioners ..	..	19,602	19,602	15,723	7,254	11,069
100	Joint Water Board, Delhi.	187	84,018	84,205	4,94,990	730	..
101	Other Local Bodies ..	..	12,466	12,466	1,949	6,303	2,042
	Total—Quasi-Public Bodies.	14,229	11,52,768	11,66,997	9,47,537	3,61,420	2,18,627
	British and Colonial Governments.						
102	Royal Airship Base, Karachi.	..	937	937	2,702	2,032	2,083
103	Singapore Straits Settlements.	10,644	..	10,644	7,248	4,163	..
104	Ceylon Government ..	..	3,143	3,143	1,838	..	..
	Total—British and Colonial Governments.	10,644	4,080	14,724	11,788	6,195	2,083
	Abstract.						
	Central—Army ..	53,15,875	32,90,830	86,06,705	82,48,014	90,69,243	1,38,23,488
	Central—Civil ..	7,70,079	49,26,811	56,96,890	29,67,467	40,30,379	38,22,712
	Railways—State-worked.	24,96,671	2,28,53,921	2,53,50,592	1,70,92,917	1,46,84,761	1,18,08,062
	Railways—Company-worked.	45,549	5,69,796	6,15,345	3,81,077	4,69,603	7,87,189
	Railways worked by Indian States.	16,899	5,15,000	5,31,899	1,31,714	1,23,114	18,801
	Total—Railways ..	25,59,119	2,39,38,717	2,64,97,836	1,76,05,708	1,52,77,478	1,26,14,052
	Provincial Governments	9,07,827	43,09,955	52,17,782	59,39,207	42,30,220	53,61,701
	Indian States ..	7,584	4,27,733	4,35,317	2,74,414	1,15,968	1,57,343
	Quasi-Public Bodies ..	14,229	11,52,768	11,66,997	9,47,537	3,61,420	2,18,627
	British and Colonial Governments.	10,644	4,080	14,724	11,788	6,195	2,083
	GRAND TOTAL ..	95,85,357	3,80,50,894	4,76,36,251	3,59,94,135	3,30,90,903	3,60,00,006

APPENDIX VII.

Statement showing the value of various classes of purchases (indigenous and imported) during 1934-35 and three preceding years (vide paragraphs 2, 16 and 24 of the Report).

Class of stores.	1934-35.		1933-34.		1932-33.		1931-32.	
	Total.	Per-centage.	Total.	Per-centage.	Total.	Per-centage.	Total.	Per-centage.
I.—TEXTILES AND LEATHER.								
(a) Stores purchased in the Indian market.								
(i) Cotton—								
Indigenous ..	38,23,069	97	39,93,164	97	37,06,628	95·4	37,69.231	92·2
Imported ..	1,19,200	3	1,25,069	3	1,79,581	4·6	3,17,409	7·8
(ii) Woollen—								
Indigenous ..	25,93,472	98·7	21,09,829	94·9	23,60,761	97·9	30,81,671	92·3
Imported ..	36,187	1·3	1,14,423	5·1	49,711	2·1	54,241	1·7
(iii) Jute, hemp, etc.								
Indigenous ..	12,58,447	79·7	4,89,025	69·5	4,88,972	81·9	7,38,849	86·1
Imported ..	3,20,208	20·3	2,14,420	30·5	1,08,146	18·1	1,20,225	13·9
(iv) Leather—								
Indigenous ..	1,93,281	94·3	1,28,415	96·9	1,01,671	99·4	1,15,045	99·7
Imported ..	11,604	5·7	4,062	3·1	662	·6	300	·3
Total { Indigenous	78,68,269	94·2	67,20,433	93·6	66,58,032	95·2	77,04,796	94
Total { Imported	4,87,199	5·8	4,57,974	6·4	3,38,100	4·8	4,92,175	6
Total stores purchased in the Indian market.	83,55,468	..	71,78,407	..	69,96,132	..	81,96,971	..
(b) Stores purchased from Government Departments or Depots : Indigenous								
Cotton ..	12,940	..	1,918	..	6,351	..	2,343	..
Woollen ..	1,24,950	..	60,918	..	80,542	..	1,60,660	..
Jute, hemp, etc.	199	..	..	..	26	..	..	..
Leather ..	..	..	..	..	..	..	..	..
Total ..	1,38,089	..	62,836	..	86,919	..	1,63,003	..
(c) Stores purchased direct from outside India : Imported.								
Cotton ..	1,36,407	..	2,21,928	..	1,39,838	..	9,42,259	..
Woollen ..	6,34,244	..	9,75,874	..	5,05,153	..	9,62,345	..
Jute, hemp, etc.	3,21,149	..	1,16,316	..	1,84,113	..	3,50,400	..
Leather ..	..	..	..	..	..	..	..	..
Total ..	10,91,800	..	13,14,118	..	8,29,104	..	22,55,004	..
Total { Indigenous	80,06,358	83·5	67,83,269	79·3	67.44,951	85·2	78,67,799	74·2
Total { Imported	15,78,999	16·5	17,72,092	20·7	11,67,204	14·8	27,47.179	25·8
Total—Textile and Leather	95,85,357	..	85,55,361	..	79,12,155	..	1,06,14,978	..
II.—ENGINEERING AND MISCELLANEOUS STORES.								
(a) Stores purchased in the Indian market ..	3,79,17,875	..	2,73,22,970	..	2,51,49,998	..	2,53,51,149	..
(b) Stores purchased from Government Departments or Depôts	7,481	..	2,682	..	10,731	..	2,207	..
(c) Stores purchased direct from outside India ..	1,25,538	..	1,13,122	..	18,019	..	31,672	..
Total—Engineering and Miscellaneous stores. ..	3,80,50,894	..	2,74,38,774	..	2,51,78,748	..	2,53,85,028	..
GRAND TOTAL ..	4,76,36,251	..	3,59,94,135	..	3,30,90,903	..	3,60,00,006	..

APPENDIX VIII.

Values in rupees of stores purchased in each province during the year 1934-35, and three preceding years.

(*Vide* paragraphs 2 and 16 of the Report.)

Class of material and Province in which purchased.	1934-35.	1933-34.	1932-33.	1931-32.
Cotton Materials.				
United Provinces	14,52,662	11,95,471	13,64,233	14,78,764
Bombay	8,69,299	8,99,438	8,66,972	9,32,757
Madras	7,79,057	9,09,873	8,77,825	6,83,173
Bengal	6,70,110	7,43,664	6,10,074	8,14,237
Central Provinces	1,21,288	3,15,059	44,120	7,005
Punjab	28,233	42,000	82,438	31,413
Delhi	16,656	11,055	40,122	1,36,291
Burma	2,294	..	..	..
Mysore	2,105	1,499	..	..
Hyderabad	563	174	..	..
Indore	..	..	425	..
Total—Cotton Materials ..	39,42,269	41,18,233	38,86,209	40,86,640
Woollen Materials.				
Punjab	8,10,658	4,52,745	3,64,280	8,68,826
United Provinces	7,38,403	6,89,105	5,54,196	10,51,185
Madras	4,01,012	5,19,746	8,24,852	7,32,924
Bombay	3,71,840	4,28,808	3,18,586	3,59,189
Bengal	2,92,959	1,33,145	3,07,420	1,18,805
Delhi	11,479	..	36,848	..
Kashmir	2,633	546	3,465	4,983
Mysore	675	..	..	..
Central Provinces	..	157	..	..
Indore	..	..	825	..
Total—Woollen Materials ..	26,29,659	22,24,252	24,10,472	31,35,912
Jute, Hemp and Flax Materials.				
Bengal	13,76,414	5,85,478	4,99,815	7,38,137
Bombay	92,083	61,115	49,176	47,826
Punjab	88,166	23,095	18,423	239
United Provinces..	15,971	30,749	23,024	67,526
Madras	6,479	1,596	948	854
Delhi	5,232	1,412	5,732	4,492
Mysore	310	..	..	..
Total—Jute, Hemp and Flax Materials	15,78,655	7,03,445	5,97,118	8,59,074

Class of material and Province in which purchased.	1934-35.	1933-34.	1932-33.	1931-32.
Leather Materials.				
United Provinces..	1,17,590	81,084	78,816	89,464
Bengal	30,600	33,369	13,707	21,593
Punjab	28.001	524	2,321	1,836
Bombay	26,242	16,976	5,598	1,222
Madras	2,452	371	1,209	1,230
Central Provinces	..	138	..	..
Gwalior	..	15	244	..
North-West Frontier Province ..	..	..	438	..
Total—Leather goods ..	2,04,885	1,32,477	1,02,333	1,15,345
Eginneering, Hardware and Miscellaneous stores.				
Bengal	1,85,19,163	1,29,15,049	1,23,93,782	1,10,42,688
Bombay	82,97,207	92,65,361	83,69,813	92,40,894
Bihar and Orissa	30,22,905	87,167	84,122	15,960
Punjab	27,26,101	28,89,034	18,71,313	27,46,878
Burma	11,94,953	2,51,428	2,78,050	3,39,127
Delhi	9,83,733	4,90,177	5,92,574	5,54,345
Central Provinces	8,28,290	12,648	20,339	22,204
Madras	6,89,390	8,99,935	8,73,500	7,36,535
United Provinces	6,03,625	4,37,104	5,82,211	6,35,396
Bundi	3,18,563	..	..	..
Mysore	1,80,841	54,538	77,815	16,595
Assam	1,72,281	13,207	6,118	488
Baroda	1,68,407	..	..	..
Hyderabad	1,13,209	..	..	..
Gwalior	75,442	..	..	..
Porbander	13,257	..	..	..
Aundh	9,010	..	..	39
Andamans	1,438	..	..	..
North-West Frontier Province ..	60	..	47	..
Baluchistan	..	6,336	..	..
Indore	..	986	314	..
Total—Engineering, Hardware and Miscellaneous stores.	3,79,17,875	2,73,22,970	2,51,49,998	2,53,51,149

Class of material and Province in which purchased.	1934 35.	1933-34.	1932-33.	1931-32.
Total.				
Bengal	2,08,89,246	1,44,10,705	1,38,24,798	1,27,35,460
Bombay	96,56,671	1,06,71,698	96,10,145	1,05,81,888
Punjab	36,75,159	34,07,398	23,38,775	36,52,192
Bihar and Orissa	30,22,905	87,167	84,122	15,960
United Provinces..	29,28,251	24,33,513	26,02,480	33,22,335
Madras	18,78,390	23,31,521	25,78,334	21,54,716
Burma	11,97,247	2,51,428	2,78,050	3,39,127
Delhi	10,17,102	5,02,644	6,75,276	6,95,128
Central Provinces	9,49,578	3,28,002	64,459	29,209
Bundi	3,18,563	..	..	..
Mysore	1,83,931	56,037	77,815	16,595
Assam	1,72,281	13,207	6,118	488
Baroda	1,68,407	..	..	..
Hyderabad	1,13,772	174	..	..
Gwalior	75,442	15	244	..
Porbunder	13,257	..	..	..
Aundh	9,010	..	..	39
Kashmir	2,633	546	3,465	4,983
Andamans	1,438	..	..	..
North-West Frontier Province ..	60	..	485	..
Baluchistan	..	6,336	..	..
Indore	..	986	1,564	..
Total—Stores purchased in the Indian market.	4,62,73,343	3,45,01,377	3,21,46,130	3,35,48,120
Total—Stores purchased from Government Departments or Depôts (*vide* Appendix VII).	1,45,570	65,518	97,650	1,65,210
Total—Stores purchased direct from abroad (*vide* Appendix VII).	12,17,338	14,27,240	8,47,123	22,86,676
Grand Total ..	4,76,36,251	3,59,94,135	3,30,90,903	3,60,00,006

APPENDIX IX.

Lists of Items of Stores purchased on " Rate " and " Running " contracts.

(*Vide* paragraphs 2 and 28 of the Report.)

A.—*Items of stores for which " Rate " and " Running " contracts were entered into by the Headquarters Office during the year 1933-34.*

TEXTILE AND LEATHER STORES.

1. Bags, postal.
2. Bandage cloth.
3. Bunting cloth, red and green.
4. Cloth jaconet.
5. Cloth, grey, domestic.
6. Cloth, madapalam.
7. Cloth, sheeting.
8. Capes, W. P.
9. Coats, W. P.
10. Cotton waste, white, teased and unteased.
11. Cotton waste, coloured.
12. Dosuti.
13. Drill.
14. Durries.
15. Dusters.
16. Flags, bunting.
17. Fringes.
18. Gauze absorbent, cotton, white.
19. Holland cloth.
20. Lining cloth.
21. Long cloth.
22. Mosquito cloth.
23. Pugri cloth.
24. Putties.
25. Sheets, bed.
26. Tapes.
27. Thread, sewing.
28. Towels, hand.
29. Turbans.
30. Twill.
31. Twine.
32. Umbrellas.
33. Wicks.
34. Wool cotton, absorbent.

Woollen.

35. Blankets.
36. Broad cloth, superfine.
37. Caps, balaclava.
38. Drawers, woollen.

Woollen—contd.

39. Felt, white.
40. Flannel.
41. Jerseys.
42. Jackets, cardigan.
43. Putties, woollen.
44. Serge.
45. Twill cloth.

Jute, Hemp and Miscellaneous.

46. Bags, mail, postal.
47. Buttons, gold.
48. Coir yarn and matting.
49. Cordage, manilla.
50. Lace, gold.
51. Paulins, flax and jute.
52. Tassels, gold.
53. Uniforms.

Leather.

54. Portfolios, R. M. S.

Engineering and Miscellaneous Stores.

55. Acids, Sulphuric, Nitric and Hydrochloric.
56. Alumina Ferric.
57. Antimony.
58. Badges, brass.
59. Bearings, Ball and Roller.
60. Belting, train lighting, of sizes.
61. Bituminous solution.
62. Boards, notice or sign, enamelled, sheet steel.
63. Boards, paper and angular tin.
64. Bolts, nuts and rivets.
65. Bricks, fire and clay, fire.
66. Brushes, carbon.
67. Brushes, bunister, single, for sweeping.
68. Bugles, stamp dampers and paper files, brass.
69. Buttons, gilt, brass.
70. Buffer shanks, springs and parts.

Engineering and Miscellaneous Stores—contd.

71. Cables, V. I. R. braided and compounded, 250 volts, 600 megohm grade.
72. Cables, tough rubber sheathed, 250 volts, 600 megohm grade.
73. Cables, V. I. R. insulated, lead sheathed, 250 volts, 600 megohm grade.
74. Cables, signalling, "Iconite" insulated, 660 volts grade 1/044 size and supertropical rubber insulated.
75. Cables, flameproof.
76. Cables, "Semaphite" for house wiring, single core, 600 megohm grade, of sizes.
77. Calcium Carbide.
78. Candles, wax.
79. Carbon elements.
80. Cells, inert.
81. Cells, train lighting "Lux", "Nife", "Edison", "Alconum", "Alklum".
82. Cells, caustic soda and renewals.
83. Cells, dry.
84. Cement, ordinary and rapid hardening.
85. Charpoys, iron piping.
86. Chests, cash, iron.
87. Chloride of lime.
88. Cooking ranges.
89. Cords, flexible, twin core, cotton and silk braided, 250 volts, 600 megohm grade.
90. Couplers, Kent, spares for.
91. Creosote.
92. Crossings of rails.
93. Cutlery.
94. Disinfectants.
95. Dynamos, train lighting and spares.
96. Elements, superheater.
97. Electrodes.
98. Fans, ceiling, table, A. C. and D. C.
99. Files, steel of sorts.
100. Fire extinguishers and refills.
101. Fittings, Vacuum brake.
102. Gas, acetylene, dissolved.
103. Gas, carbonic acid.
104. Gas, oxygen.
105. Graphite.
106. Handcuffs.
107. Hoses, canvas, I. R. delivery and India rubber.

Engineering and Miscellaneous Stores—contd.

108. Hoses couplings, brass.
109. Insulating materials :—
    - (*a*) Compounds.
    - (*b*) Cotton tape, Egyptian.
    - (*c*) India rubber strip, purepara, of sizes.
    - (*d*) Tape, adhesive, black, of sizes.
    - (*e*) Varnish, insulating, air drying and stoving.
110. Instruments Evershed and Vignoles.
111. Lamp holders.
112. Lamp locks.
113. Lamps, electric, metal filament, vacuum type and gas filled.
114. Lamps, electric, carbon filament.
115. Lamps, train lighting, metal filament, vacuum and gas filled types.
116. Lamps, electric, for locomotives and cablights.
117. Lamps, electric, automobile, metal filament, pipless.
118. Lanterns, hurricane and chimneys.
119. Lantern or common lamps, tin.
120. Letter boxes.
121. Liquid chlorine.
122. Locks, galvanized iron and brass.
123. Metal polish.
124. Meters, electric.
125. Meters, water.
126. Oil, castor.
127. Oil, cocoanut.
128. Oil, fuel.
129. Oil, gas making.
130. Oil, kerosene.
131. Oil, linseed, raw and double boiled.
132. Oil, lubricating and greases.
133. Paints, enamels, varnishes, etc.
134. Paint remover.
135. Petrol.
136. Pig Iron.
137. Plates, separating and draw hooks spring.
138. Plates, division galvanised and coil spring washers.
139. Plates, division galvanised and auxiliary rubber spring parting.
140. Plates, division and parting.
141. Plates, bearing.
142. Point rodding.

Engineering and Miscellaneous Stores—contd.

143. Pipes, feed, stoneware, mild steel and fittings.
144. Pipes and specials.
145. Pipes, asbestos cement pressure and detachable joints Everite.
146. Road dressing materials.
147. Road signs.
148. Roofing materials for railway carriages, etc.
149. Rosin.
150. Rubber pilot balloons, of sizes.
151. Sac elements for No. 1 Leclanche cells with winged terminals.
152. Sac elements "Koda" type.
153. Safes, burglar and fire proof.
154. Separators "Porbonite".
155. Scales and weights.
156. Screws, wood, of sorts.
157. Seals, lead.
158. Sheets, asbestos, corrugated and flat, tiles with accessories.
159. Sheets, glass.
160 Shellac.
161. Signals, fog, detonating.
162. Soaps, soft and hard.
163. Spear heads with brass bells.
164. Spirit, methylated denatured.
165. Springs I. R. volute, Drawbar.
166. Springs I. R. Bolster, steel.
167. Standards table and shades.
168. Steel sections (M. S. tee, angles, plates and rounds).
169. Sulphate of alumina.
170. Sulphate of copper.
171. Switches, tumbler, single pole, house wiring.
172. Switches, train lighting.
173. Switches, Tumbler, combined with plugs.
174. Switches for rails.
175. Tallow.
176. Tar, crude.
177. Target apparatus.
178. Tool, steel.
179. Tools, track.
180. Tubes, steel, solid.
181. Turpentine, genuine and substitute.

Engineering and Miscellaneous Stores—contd.

182. Tyres and tubes, rubber, for bicycles.
183. Valves, sluice, water.
184. Vehicles and spare parts for the same—
    (*a*) Morris cars.
    (*b*) Morris commercial.
    (*c*) Thornycroft "A4" and "A5" medium six wheeled lorries spares.
    (*d*) Spares for Albion chassis model I. O. 41 and 32 overtype.
    (*e*) Spares for Humber snipe touring cars.
    (*f*) Ford cars, trucks and chassis.
    (*g*) Spares for Morris Oxford and Isis cars.
    (*h*) Spares for Wolseley cars.
    (*i*) Spares for Morris commercial vehicles.
    (*j*) Spares for Chevrolet vehicles.
185. Zincs, cylindrical cutaway pattern for No. 2 Leclanche cells.
186. Zinc elements for 'AD' wet cells type No. 245.

B.—*Contracts entered into by the Controller of Purchase, Calcutta.*

Textiles and leather stores.

1. Bags, gunny, 'A' twill.
2. Bags, gunny, 'B' twill.
3. Bags, heavy, 'C'.
4. Bags, Liverpool, twill.
5. Bags, tool, with straps.
6. Bags, kit, green, cotton canvas.
7. Bags, leather, cash.
8. Bags, leather, tool, with straps.
9. Bags, canvas flax, for lineman's tools.
10. Canvas, jute.
11. Caps, fez.
12. Caps, forage.
13. Caps, straw.
14. Caps, broad cloth, black, cherry top.
15. Caps, serge.
16. Caps, velvet.
17. Caps, serge, with patent leather peak.
18. Caps, drill, dark blue.
19. Carpets.
20. Chamois leather.
21. Cloth, alpacca, dark blue.

Textile and leather stores—contd.

22. Cloth, baize.
23. Cloth, brattice.
24. Cloth, dungree.
25. Cloth, dosuty.
26. Cloth, hessian.
27. Cloth, long.
28. Cloth, mulmul.
29. Cloth, nainsook.
30. Cloth, saloo.
31. Cloth, selvyt.
32. Cloth, sheeting.
33. Cloth, sponge.
34. Cloth, table, cotton, white, damask.
35. Coir fibre, loose.
36. Cotton waste.
37. Covers, drill, white, for mattresses.
38. Covers, long cloth bleached.
39. Curtains, mosquito.
40. Fish line.
41. Flannel, khaki.
42. Hats, sola.
43. Helmets, white, cork, drill, covered.
44. Hides, tanned, butt, English.
45. Hides, cow.
46. Hides, buffalo.
47. Jute, combing.
48. Jute, dressed.
49. Jute, gasketting.
50. Leather for washers.
51. Line, log.
52. Netting, mosquito.
53. Newar, cotton, khaki.
54. Paulins, flax canvas, of sizes.
55. Pouches, leather, for lineman's tools.
56. Ropes, coir.
57. Ropes, manilla, towing cable 9 strand.
58. Sandles, leather.
59. Skins, sheep, country.
60. Tape, cotton, white.
61. Tents, pal, half.
62. Tents, M. M. B.
63. Thread, sewing, linen.
64. Topees, Curzon.
65. Topees, sola.
66. Towels, honeycomb.
67. Towels, huckaback.
68. Twine, flax.

Textile and leather stores—contd.

69. Twine, hemp.
70. Twine, jute.
71. Twine, sailmakers.
72. Umbrellas, trolly.
73. Waste thread, hessian.
74. Yarn, spun, hemp tarred.

Engineering and Miscellaneous.

75. Acid, sulphuric.
76. Anchors, rail, mills.
77. Asbestos mill board.
78. Asbestos I. R. sheeting.
79. Asbestos sheet jointing.
80. Axes, felling.
81. Axes, pick.
82. Barrels for cylinders.
83. Baro, stretcher.
84. Belting, balata.
85. Belting, cotton.
86. Belting, Gripoly.
87. Belting, train lighting.
88. Belting, hair.
89. Belting, leather.
90. Bill hooks.
91. Blades, fan, roof.
92. Blocks, rubbing, pumice.
93. Bolts and nuts.
94. Bones, cuttle fish.
95. Bricks, fire.
96. Brooms.
97. Brushes, banister.
98. Brushes, carbon.
99. Brushes, lettering.
100. Brushes, sash, tool.
101. Brushes, steel, wire.
102. Brushes, varnish.
103. Beaters, wooden.
104. Buckets.
105. Cable, electric.
106. Cage, brass, for push cocks.
107. Card board, corrugated.
108. Cellulose, lacquer.
109. Cellulose, retarder.
110. Cellulose remover.
111. Cement, roof, asbestos, valamoid.
112. Chain alarm, signal.
113. Chisels, chipping, flat.
114. Clips, hose pipes.

Engineering and Miscellaneous—contd.

115. Compound, insulating.
116. Compound, Chatterton.
117. Cordage, telephone.
118. Coupling, iron.
119. Crockery.
120. Crossings, rail.
121. Cutlery.
122. Degchies, aluminium, with lids.
123. Diaphrams, valve, release.
124. Dubbin, black.
125. Electrodes.
126. Electrolyte, solid.
127. Elements, circular.
128. Emery cloth.
129. Enamels, white, glossy.
130. Files.
131. Fittings, light.
132. Flour, fine.
133. Frames, adjustable, hacksaw.
134. Fry pans, aluminium.
135. Globes, glass.
136. Glass paper.
137. Glass sheet, red.
138. Glass panes.
139. Glassware.
140. Grease airolene.
141. Grease, maxim.
142. Hammers, ball, pane.
143. Hammers, flogging.
144. Handles, of sorts.
145. Hinges, steel.
146. Hinges, body, side door.
147. Holder, steel, and drill bits.
148. Horn, check, section.
149. Hose pipe, siphon.
150. Hose, pneumatic.
151. Hydrometers.
152. Jars, glass.
153. Joists of sorts.
154. Kettles, aluminium.
155. Levers for release valves.
156. Mill board, asbestos.
157. Netting, wire G. I.
158. Oil, C.-707.
159. Oil, B. O. C. spindle.
160. Oil, B.-835.
161. Oil, Castor.

Engineering and Miscellaneous—contd.

162. Oil, Chloridol.
163. Oil, colza, mineral.
164. Oil, P.-988.
165. Oil, gargeon.
166. Oil, lubricating.
167. Oil, shell, engine, C.-4.
168. Oil, Tonikol.
169. Packing, Bedlam's.
170. Pads, I. R. window.
171. Paint, acid resisting.
172. Paint, alkaliproof.
173. Paint, bowranite.
174. Plates, bearing, C. I.
175. Plates, panel, mild steel.
176. Phowrahs.
177. Pliers, cutting and twisting.
178. Plugs, I. R.
179. Plugs, rawl.
180. Plugs, wood.
181. Polish, crown.
182. Powder, carbolic.
183. Rings, gland packing.
184. Rings, rolling.
185. Rodding point.
186. Ropes, asbestos.
187. Ropes, wire.
188. Rust remover.
189. Saws, hand.
190. Screws, wood, brass, of sorts.
191. Screw drivers.
192. Seals and strappings.
193. Sections, positive.
194. Sheeting, asbestos.
195. Sheeting I. R.
196. Sheeting, insertion, I. R.
197. Sleeves, paper.
198. Soap, country.
199. Soda ash, washing.
200. Solder, resin, cored.
201. Spanners, clyburn.
202. Staples, fibre.
203 Steel, mild, hexagon.
204. Steel, mild, plates.
205. Steel, spring, flat.
206. Steel, square, " Dunic ".
207. Swan, necks.
208. Switches, rail.

Engineering and Miscellaneous—contd.

209. Solvent, G. B.
210. Tapes, metallic, measuring.
211. Valve, push and release.
212. Ventilators, roof.
213. Washers, joint gland box.
214. Watches, pocket, of sorts.
215. Wheels, steel, pressed.
216. Whitting.
217. Wire, flexible.
218. Wire, jumper.
219. Wire gauze.
220. Wire, maconite.
221. Wire, signal.
222. Wire, silicon, bronze.
223. Wire, wove, G. I.
224. Wrenches, sliding.

C.—Contracts entered into by the Controller of Purchase Bombay.

Textile stores and leather.

1. Bags, brown, leather.
2. Bags, canvas.
3. Caps, Fez, dark brown.
4. Cloth, long.
5. Drill.
6. Hides, hydraulic leather tanned, butt.
7. Laces, leather.
8. Serge, blue.
9. Skins, goat.
10. Twist cotton.
11. Uniforms.

Engineering and Miscellaneous.

12. Bees wax, camphor, chocolate, brown Goa.
13. Bolts, door, aldrop, brass.
14. Bolts, flush, brass.
15. Bicycles and accessories.
16. Brooms, hair, brushes, scrubbing.
17. Brushes, washing.
18. Brushes, sweeping.
19. Brushes, painters.

Engneering and Miscellaneous—contd.

20. Brushes, spoke.
21. Brushes, superfine mop, dressers and cleaners.
22. Brushes, Tar.
23. Brushes, whitewash.
24. Brushes, camel hair.
25. Buckets, iron.
26. Canes, rattoon.
27. Charts, speed recording.
28. Claws, chisels and diamond glaziers.
29. Clocks.
30. Cocoanut husks.
31. Cocks, bib, and stop, brass.
32. Connectors, copper wire.
33. Cords, telephone.
34. Cover, bakelite, sheets, presspan, etc.
35. Fittings, berth light.
36. Hammers, hand, ball pane, hacksaw blades.
37. Hammers, sledge, of sizes.
38. Handles, wood, blades, hacksaw of sizes.
39. Hose, delivery, leather.
40. Knives, clasp.
41. Nails, Rose, head, W. I.
42. Nails, French, flat head.
43. Nails, Cut tack.
44. Nails, Coffin head.
45. Nuts, fly, iron rivets, copper.
46. Oil, crankchamber.
47. Oil, cylinder.
48. Pliers, blades, steel, vices.
49. Regulators, of sorts.
50. Sheets, expanded metal.
51. Sheets, India rubber.
52. Sheets, mica, pane.
53. Spanners, fish bolts, double headed.
54. Squares, M. S.
55. Tape, asbestos.
56. Tape plugs, Whitworth, etc.
57. Timepieces.
58. Valves, wheel.

D.—*Contracts entered into by the Controller of Purchase, Karachi.*

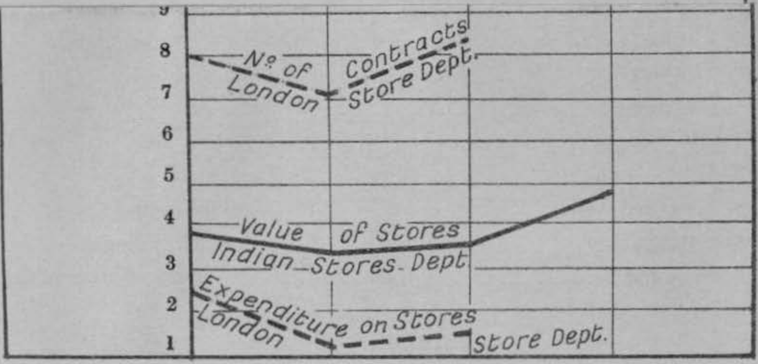
1. Belting, leather.
2. Belting, Roko (Hair).
3. Bicycles.
4. Bolts and Nuts, M. S. and washers.
5. Brooms.
6. Brushes, Banister, and bass.
7. Brushes, paint, foundry.
8. Celotex sheets.
9. Clocks.
10. Crockery.
11. Crucibles.
12. Cutlery.
13. Emery cloth.
14. Files, cast steel.
15. Fittings, door
16. Glass panes.
17. Handles for shovels.
18. Hacksaw blades.
19. Nails, iron, wire.
20. Petromax lamps.
21. Pickaxes.
22. Rivets, M. S.
23. Sand papers.
24. Scales, spring, balance.
25. Screws, iron and brass.
26. Soda, washing.
27. Soda, caustic.
28. Tumblers, glass.
29. Timepieces.
30. Tape, measuring.
31. Valves, Hopkinsons.
32. Water fittings, Gunmetal and Brass

APPENDIX X.

VALUE OF STORES PURCHASED AND NUMBER OF CONTRACTS PLACED BY THE LONDON AND INDIAN STORES DEPARTMENTS.

(*Vide* paragraphs 2 and 33 of the report.)

The London Store Department figures represent the value of contracts for stores and freight converted into Indian currency at a uniform rate of 1*s*. 6*d*. to the rupee. The Indian Stores Department figure represent the value of contracts placed.



	1931-32.	1932-33.	1933-34.	1934-35.
No. of contracts.				
London Store Department.	8,096	7,181	8,122	—
Indian Stores Department.	34,928	44,045	49,767	61,803
Value in thousands of Rupees.				
London Store Department.	23,050	12,742	14,053	—
Indian Stores Department.	36,000	33,090	35,994	47,636

The figures of expenditure on stores and freight given in previous reports have been replaced by the "value of contracts for stores and freight placed by the London Store Department" in order to place the figures of the two departments on a more comparable basis.

APPENDIX XI.

Comparative statement of purchases made by the London and Indian Stores Departments.

The figures are in thousands of rupees. (*Vide* paragraphs 2 and 33 of the Report.)

Indenting Departments.	Textiles and Leather stores.		Engineering, Hardware and Miscellaneous Stores.		Other classes of stores. (a)		Total.	
	London Stores Department.	Indian Stores Department.	London Stores Department.	Indian Stores Department.	London Stores Department.	Indian Stores Department.	London Stores Department.	Indian Stores Department.
1. Central Departments.— Army—								
1931-32	978	6,968	6,723	6,855	2,828	..	10,529	13,823
1932-33	410	4,298	595	4,771	7,497	..	8,502	9,069
1933-34	414	4,659	657	3,589	9,797	..	10,868	8,248
2. Central Departments.— Civil—								
1931-32	7	816	787	3,007	1,252	..	2,046	3,823
1932-33	6	1,147	172	2,883	1,265	..	1,443	4,030
1933-34	8	825	88	2,143	835	..	931	2,968
3. Railways.—								
1931-32	4	1,692	307	10,922	2	..	313	12,614
1932-33	10	1,344	350	13,934	20	..	380	15,278
1933-34	1	2,046	567	15,559	29	..	597	17,605
4. Provincial Governments.—								
1931-32	98	1,138	7,720	4,224	858	..	8,676	5,362
1932-33	87	1,097	505	3,133	1,230	..	1,822	4,230
1933-34	80	1,015	326	4,924	807	..	1,213	5,939
5. Indian States, Foreign Governments and *Quasi*-Public Bodies.—								
1931-32	..	1	..	377	..	..	..	378
1932-33	..	26	..	458	..	..	..	484
1933-34	..	10	..	1,224	..	..	..	1,234
Total—								
1931-32	1,087	10,615	15,537	25,385	4,940	..	21,564	36,000
1932-33	513	7,912	1,622	25,179	10,012	..	12,147	33,091
1933-34	503	8,555	1,638	27,439	1,468	..	13,609	35,994

N.B.—The figures of the India Store Department, London, have been converted at the rate of 1*s.* 6*d.* = Re. 1/-.

(*a*) Stores not dealt with by the Indian Stores Department, *e.g.*, Medical stores, munitions, stationery and printing, stamps, currency, foodstuffs. etc.

APPENDIX XII.

List of specifications framed by the Indian Stores Department current at the end of the year 1934-35.

(*Vide* paragraphs 3 and 36 of the Report.)

INDEX.

Section No.	Name of stores. Main head.	Name of stores. Sub-head.	Classification reference.
1	Bridgework	....	A.
2	Engineer's plant (excluding petty tools).	....	B.
3	Workshop machinery and heavy tools.	....	C.
4	Ballast and permanent way materials.	....	D.
5	Rolling stock	....	E.
6	Station materials and fencing ..	....	F.
7	General	....	G.
		(*i*) Building materials ..	G/Buildings.
		(*ii*) Chemicals	G/Chemicals.
		(*iii*) Fuel	G/Fuel.
		(*iv*) Furniture	G/Furniture.
		(*v*) Drawing, mathematical and surveying instruments	G/Instruments.
		(*vi*) Lamps and lamp fittings ..	G/Lamps.
		(*vii*) Leather and India rubber goods	G/Leather.
		(*viii*) Metals	G/Metals.
		(*ix*) Miscellaneous	G/Miscellaneous.
		(*x*) Oils and lubricants ..	G./O.
		(*xi*) Paints and Painter's materials	G./P.
		(*xii*) Printing presses and material	G/Prints.
		(*xiii*) Sanitary Stores	G/Sanitary.
		(*xiv*) Stationery	G/Stationery.
		(*xv*) Cloth, clothing and equipment	G/Textiles.
		(*xvii*) Hardware, copper, tin and zinc ware ..	G/Ware.
		(*xviii*) Waterworks stores ..	G/W. W.
8	Electrical plant and materials	....	H.
9	Power and industrial plant ..	....	P. I.

List of Indian Stores Department General Specifications current at the end of the year 1934-35.

Specification No.	Description.	Remarks.
	BRIDGEWORK A.	
A-33 J	Steelwork	
A-34 C	Steel sheet piling with clutch (joist pattern) ..	Saleable.
A-40 D	Steel bridgework	
A-48 E	Tank and staging	Saleable.
A-49 A	Tanks steel welded with staging, welded or riveted ..	Saleable.
	ENGINEER'S PLANT (EXCLUDING PETTY TOOLS) B.	
B-45 B	Vertical boilers	Saleable.
B-50 D	Locomultitubular boiler	Saleable.
B-53 B	Hand operated overhead travelling and traversing crane	Saleable.
	WORKSHOP MACHINERY AND HEAVY TOOLS C.	
C-29 B	Machine tools	Saleable.
	BALLAST AND PERMANENT-WAY MATERIALS D.	
D-1 D	Light railway track for construction work (Not for passenger traffic)	Saleable.
D-2 C	Tip trucks for 1′—6″, 2′—0″ and 2′—6″ gauge railway contractors type	
D-6	Built-up points and crossings complete with wing rails, lever boxes and all other fittings ..	
D-15	Steel fishbolts and nuts and washers for use on Railways	
D-16 A	Steel dog spikes	Saleable.
D-17 A	Steel round spikes for rail chairs	Saleable
D-18 A	Steel screw spikes	Saleable.
	ROLLING STOCK E.	
E-28	Weigh-bridges	
E-29 A	Engine turntables	
E-32	Steam locomotive crane	
E-37 B	Steel laminated springs for locomotives, carriages and wagons far Railways	
E-38	Cast steel wheels and axles, 2′—6″ gauge	
E-42 D	Rivets or rivet bars, mild steel	
E-47 B	M. S. bolts, nuts and washers, black and galvanised..	
E-48	Cast steel wheels and axles, 2′—6″ gauge for light tip trucks and other unimportant work.	
E-49 A	Cast iron superheater headers for locos. for railways	
E-50 B	Steel tyres for locomotives, tenders, carriages and wagons	
E-53	Axle boxes, cast steel, for railway rolling stock ..	
E-54	Pulley blocks for wire or manilla rope	
E-55	Vacuum Gauge 6″ Single	

Specification No.		Description.	Remarks.
		CHEMICALS G.	
	G/Chemicals—9 B	Nitric acid, commercial	Saleable.
	„ 11 A	Hydrochloric or muriatic acid, commercial ..	Saleable.
	„ 12 A	Hydrochloric acid, pure	Saleable.
	„ 14 A	Sulphuric acid, concentrated, for accumulators ..	Saleable.
	„ 15 A	Sulphuric acid, commercial quality	Saleable.
	„ 16 A	Alumina ferric	Saleable.
	„ 17 A	Sulphate of alumina	Saleable.
	„ 18 C	Copper sulphate	Saleable.
	„ 19 A	Potassium cyanide for surface hardening of tools ..	Saleable.
‡	„ 20 B	Acetylene gas (dissolved) for industrial purposes ..	
	„ 22 A	Chloride of Lime or Bleaching powder	Saleable.
‡	„ 23 A	Calcium carbide	
‡	„ 24 C	Sal ammoniac (Ammonium chloride)	
‡	„ 25 A	Gas, carbonic acid (Carbon-dioxide)	
‡	„ 26 A	Caustic soda, commercial	
	„ 27	Borax for brazing	Saleable.
	„ 28	Soda ash	Saleable.
‡	„ 29 A	Alum (potash) commercial	Saleable.
		LEATHER AND INDIA RUBBER GOODS G.	
	G/Leather—43 A	Leather, buffalo and cow and sheep skin	Saleable.
	„ 48 B	Boots, ammunition, No. 5 quality	
‡	„ 61 A	Skin wash or chamois leather	
*	„ 63	Laces, Leather 34 inch (russet kip)	
*	„ 64	Upholstery hides	
		METALS G.	
	G/Metals— 9	Manganese steel castings	
	„ 16 E	Mild steel rods for ferro-concrete work	Saleable.
	„ 17 A	Case hardening and welding quality steel bars and billets	
	„ 40 A	Tinned plate	
	„ 41 F	Galvanised mild steel sheets and ridging (flat and corrugated)	Saleable.
	„ 45 A	lead Sheet	
	„ 46 A	Pig, lead	Saleable.
	„ 48 A	Pig, iron	Saleable.

Specification No.	Description.	Remarks.
	METALS G—*contd.*	
G/Metals— 52	Copper alloy for carriage and wagon axle-box brasses	
" 53 B	Soft solders	
‡ " 54 B	Tin sticks (for tinning cooking vessels and similar purposes)	Saleable.
‡ " 55 A	Tin ingots (ordinary and refined)	Saleable.
" 56 A	Copper ingot	
" 57 A	Antifriction metal for locomotive, carriage and wagon purposes	
" 58 A	Copper sheets, annealed for spinning or cold working	
" 59 A	Brass sheets, annealed, for spinning or cold working and die pressing	
" 60	Zinc sheets	
" 67	Balls and rollers, steel, and ball and roller bearings ..	
" 68	Brass bars for screwing and machining	
" 69	High tensile brass bars and sections, grade 'B' 35 tons per square inch quality	
" 70	High tensile brass bars and sections, grade 'A' 30 tons per square inch quality	
" 71 A	Antimony ingots	
	MISCELLANEOUS G.	
‡G/Misc.— 1 F	Padlocks and locks, box, drawer, etc.	Saleable.
" 15 A	Safes, burglar-resisting, non-fire resisting ..	
" 25 A	Buttons, hollow, and badges, brass, gilding metal, nickel silver, German silver, white metal, silver and 'bronzed'	Saleable.
" 30 B	Fire extinguishers, chemical operated, soda acid or foam types	Saleable.
" 32 D	Seals, lead, circular type for general purposes ..	Saleable.
" 35 B	Liquid metal polish	Saleable.
" 36 A	Lead yarn for caulking	Saleable.
" 37 C	Buckets, mild steel, galvanised	
" 38 A	Fire bricks	
" 39	Fire clay	
" 40 A	Candles, wax, long	Saleable.
" 41 A	Candles, wax, carriage	Saleable.

Specification No.	Description.	Remarks.
	MISCELLANEOUS G—*contd.*	
‡ G/Misc.— 51 A	Vitreous Enamelled sheet steel gauges and numeral plates	Saleable.
,, 52	Feeders, oil, spring (one pint and ½ half pint capacity)	
‡ ,, 57 A	Unlined, flax canvas, fire hose.	
‡ ,, 58 A	Unlined, flax canvas, water delivery hose, for ordinary purposes.	
‡ ,, 59 A	Unlined, flax canvas, hose, water column.	
,, 61	Plaster of Paris	Saleable.
,, 62 A	Rosin	Saleable.
* ,, 66	Road signs and standards.	
,, 69	Hose, India rubber, compressed air delivery.	
,, 70	Hose, India rubber, cold water for ordinary purpose.	
	OILS, AND LUBRICANTS.	
*‡G/O 1 to 84	Oils and Lubricants (Pamphlet)..	Saleable.
	MISCELLANEOUS MATERIALS.	
G/O.P.-1 A	Castor seed	Saleable.
,, 2	Button lac.	
,, 3 C	Shellac	Saleable.
,, 4 B	Spirits, denatured, methylated	Saleable.
,, 13	Oil, air-craft, medium.	
,, 14	Oil, air-craft, heavy	
,, 33 C	Creosote oil	Saleable.
,, 38	Petrol, aviation	
60 C	Soap, hard	Saleable.
61 C	Soft, soap	Saleable.
,, 64 A	Tar coal for road purposes	Saleable.
,, 65 A	Tar, crude	Saleable.
,, 66 A	Pitch, coal tar, medium	Saleable.
,, 68 A	Oxidized (blown) petroleum bitumen	Saleable.
,, 69 A	Steam refined petroleum bitumen	Saleable.
,, 162	Varnish, insulating, black stoving	
,, 163	Varnish, insulating, black air-drying	
,, 164	Compound, special high-melting, tropical, for cable sealing boxes, suitable for 6000 volts working pressure.	

Specification No.	Description.	Remarks.
	MISCELLANEOUS MATERIALS—*contd.*	
G/OP—395	Temporary rust preventive.	
	PAINTS AND PAINTER'S MATERIALS, ETC. , G.	
G/P-1 to 256	Paints and Painter's materials (Pamphlet). ..	Saleable.
	TIMBERS G.	
‡G/Timbers-30 B	Sleepers (First class), Deodar, Chir, Kail, Fir and Spruce.	
„ 34 A	Teak squares.	
„ 35	Teak scantlings.	
„ 36 A	Chir or dhup squares (pinus longifolia or Canarium euphyllum).	
„ 37	Toon squares or scantlings (cederela toona).	
	TOOLS—G.	
‡G/Tools-1 B	Tools for earthwork, etc. (picks and beaters, kodalies, powrahs, mamooties or hoes, sledge and other hammers, jumper and drill steel) ..	Saleable.
„ 2	Anvils.	
„ 3 A	Shovels.	
	HARDWARE, COPPER, TIN AND ZINC WARE—G.	
G/Ware-30 C	Wire, ordinary, steel, hard or annealed, round or half round, either black or galvanised (Corr. No. 1, Sept. 1934)	Saleable.
„ 31 B	Iron and steel hoop	Saleable.
„ 32 D	Wire barbed (Corr. No. 1, Sept. 1934)	Saleable.
„ 33 C	Wire, ordinary steel, round, either black or galvanised, for making mattress cases for boulder filling, flood protection or similar work	Saleable.
„ 35 A	Brass wire gauze, mosquito proof.	
‡„ 36 B	Wire, galvanized, strand, fencing (3 ply and 7 ply) ..	Saleable.
„ 37	Short link chains (iron welded) for all services except marine.	
„ 38	Small ropes or cords of steel wire.	
„ 39 A	Steel wire ropes	Saleable.
	WATERWORKS STORES—G/W/W.	
G/W/W- 34 A	Steel pipes and specials for water mains and hydraulic power pipe lines	Saleable.
„ 35 B	Sluice valves	Saleable.
„ 43 B	Lead pipes for water.	
„ 44 B	W. I. or M. S. pipes and fittings for gas, water and steam	Saleable.
*„ 54	Water Meters.	
	ELECTRICAL PLANT AND MATERIALS—H.	
H-23A	Hand shield side entry and face entry pattern, two pin wall plugs and sockets for circuits up to 250 volts between poles (without earthing connection)	Saleable.
H-24A	Hand-shield side entry and face entry pattern, three pin type wall plugs and sockets (two-pin and earth type) for circuits up to 250 volts between earth type) for circuits up to 250 volts between poles (with earthing connection)	Saleable.

Specification No.	Description.	Remarks.
	ELECTRICAL PLANT AND MATERIALS—H—*contd.*	
H-25A	Reversible and non-reversible protected type, two-pin plugs and sockets for circuits up to 250 volts between poles (with earthing connections)	Saleable.
H-26A	Quick make and break tumbler switches (for use on circuits up to 250 volts)	Saleable.
H-27 A	Cable, electric, dry core, paper insulated telegraph, multiple, twin, telephone and composite ..	Saleable.
H-28 A	Cable, electric, dry core, paper insulated, (telephone)	Saleable.
H-29 A	Copper and bronze, jointing sleeves, for telegraph and telephone purposes	Saleable.
H-34 A	Insulators, porcelain, pin and shackle type, for overhead transmission lines up to 650 volts working pressure	Saleable.
H-42 A	Condensers, metal cased, 1st grade, for telegraphs and telephones	Saleable.
H-45	Steel, Poles, (tubular type) for electric power transmission.	
‡H-46 C	Electrical flexible cords, single conductors, etc.	
H-48 F	Fans, ceiling, with regulators (A. C.)	Saleable.
H-50 A	Bridge-megger testing sets (Corr. No. 1, Nov.. 1933)	Saleable.
‡H-51 B	Flexible unit types, iron clad panels for A. C. or D. C. constant speed motors	
H-55 F	Fans, ceiling, with regulators, (A. C.) ..	Saleable.
H-56 D	Hard drawn copper, solid and stranded, circular conductors for overhead power transmission purposes	Saleable.
H-57 A	Cable, single, core V. I. R., insulated.	
H-58 B	Wood casing and capping for electric wiring ..	Saleable.
H-60 B	Wire, copper, hard drawn. bare, for telegraph and telephones, (Corr. Nos. 1 & 2, Nov. 1933 and Sept. 1934)	Saleable.
H-61 D	Cables, electric power, paper insulated, lead covered and double steel tape armoured (Corr. No. 1, Sept. 1934.)	Saleable.
H-64 C	Fans, electric, desk or pedestal type, D. C. ..	Saleable.
H-65 C	Fans, electric, desk or pedestal type, A. C. ..	Saleable.
H-66 C	Composition, Insulators for the P. & T. Dept. (Corr. August 1933).	Saleable.
‡H-67 B	Single core, V. I. R. flame proof cable, and fire resisting cable (250 volts, 600 megohm grade)	
H-68 C	Two and four core, twin and quad twisted compound insulated, lead covered and armoured telegraph cable	Saleable.
H-69	Single core V. I. R. tropical grade insulated cable, (250 volts, 600 megohm grade).	
H-70 A	Cords, instrument (tropical finish).	
‡H-71 C	Wire, copper, silk covered	Saleable.
H-72 B	Wire, copper, cotton covered (Add. No. 1, Sept. 1934)	Saleable.

Specification No.	Description.	Remarks.
	ELECTRICAL PLANT AND MATERIALS—H—*concld.*	
H-73 A	Four core, rubber insulated, lead covered and under water telegraph cable	Saleable.
H-76 B	Insulators, porcelain, screwed pattern	Saleable.
H-77 A	Cable Multicore telephone switchboard (tropical pattern with enamelled conductors)	Saleable.
H-80 A	Steel, 7 strand, Wire, 450 lbs. per mile	Saleable.
H-81 A	Internal wiring of buildings	Saleable.
H-82 A	Wood casing and capping type for internal wiring of buildings	Saleable.
H-83 A	Galvanized iron and steel wires for telegraphs, telephones and cables.	
H-93	Type 'A' caustic soda primary cells and renewals and battery jars.	
H-94	Glass Battery jars	Saleable.
H- 95 A	Inter-carriage electric train lighting coupler cable..	
‡H-96 B	Overhead spaning aerial line cable	Saleable.
*H-97	Cable, Single core switchboard (Tropical pattern with enamelled conductor).	
‡H-98 A	Solid, hard drawn, copper weld wire	Saleable.
H-103	Sac elements for Leclanche cells.	
	POWER AND INDUSTRIAL PLANT—P. I.	
P.I. 19 B	Dragline excavator, light weight, caterpillar type, oil engine operated.	
P. I. 20 A	Dragline excavator, light weight, caterpillar type, steam operated, coal firing.	
P.I. 35 B	Dragline excavator, light weight, caterpillar type, steam operated. coal or oil firing.	
P.I. 36	Electric hoists or winches.	
P.I. 38 C	Petrol paraffin engine	
P.I. 39 A	Belting for power drive.	
P.I. 40 A	Motor boats.	
P.I. 42 A	Steam pile driving plant	Saleable.
P.I. 43 J	Crude oil engines.	
P.I. 45 B	Dragline excavator, medium weight, caterpillar type, steam operated, coal or oil firing.	
P.I. 60 A	Centrifugal pumps	Saleable.
P.I. 61 A	Stone breaker, and screen	Saleable.
P.I. 62 A	Mortar grinding, mill	Saleable.
P.I. 65 B	Dragline excavator, special light weight, steam operated, coal or oil firing.	

Specification No.	Description.	Remarks.
	POWER AND INDUSTRIAL PLANT—P. I.—*contd.*	
‡P.I. 74 B	Industrial type generators and motors D. C.	
‡P.I. 75 B	Rotary Converters	Saleable.
‡P.I. 76 B	Transformer, core type, oil immersed, self-cooled for Power and Lighting	Saleable.
‡P.I. 77 C	Normal speed revolving field type alternators.	
‡P.I. 81 E	Switchboard, 660 volts, D. C., open type	Saleable.
P.I. 82 A	D. C. generator, 3 wire type and static balancers.	
P.I. 95	Electrically operated, overhead travelling and traversing crane	
P.I. 106 G	Steam operated, Road rollers, coal or wood fired ..	Saleable.
P.I. 114 D	Supply of plant and machinery and their erection at site	Saleable.
P.I. 116 A	Supply of plant and machinery (without erection at site)	Saleable.
P.I. 130	Reciprocating steam engines for land purposes.	
P.I. 131	Steam turbine for land work	
P.I. 132	Surface condensers	
P.I. 133	Water tube boiler steam raising plant and auxiliaries.	
P.I. 134	High tension alternators of the steam turbine type or of a similar high speed driven type.	
P.I. 135	Induction motors.	
P.I. 136	Iron clad type starting and control panels for non-reversing A. C. motors up to 600 volts ..	
‡P.I. 137 A	A. C. or D. C. Punkha motor sets	
	TEXTILES—G.	
	Cotton.	
G/Tex/C-1	Cotton twine 5/10s.	
,, 6	Boy messenger's bag.	
,, 7	Sheets, ground, waterproof canvas.	
,, 8	Paulins, cotton.	
,, 10 B	Bags, kit.	
,, 11 A	Bags, ration, waterproof.	
,, 13	Capes with hood, waterproof, for Indians.	
,, 14 A	Capes and hood, waterproof for Burmans.	
,, 15 B	Newar, grey.	
,, 16 D	Putties, cotton of all shades	Saleable.
,, 18 A	Cotton, wool, absorbent	Saleable.
,, 19 B	Long cloth, cotton bleached	Saleable.
,, 21 E	Bags, Dosuti, Postal	Saleable.
,, 24 D	Yarn, cotton, grey	Saleable.

Specification No.		Description.	Remarks.
		TEXTILES G—*contd.*	
G/Tex/	28 C	Dusters, cotton, hemmed	Saleable.
„	30 B	Sheeting, unbleached for veterinary badges.	
„	33 D	Threads, cotton, sewing, coloured or white ..	Saleable.
„	34	Muslin, bleached.	
„	36 E	Bandage cloth, bleached	Saleable.
„	37 B	Cloth, alpaca, black	Saleable.
„	39 C	Cloth, paramatta, black	Saleable.
„	40 D	Twill, cotton, khaki	Saleable.
‡ „	43 E	Lining cloths, cotton, satin.	
„	45 F	Canvas, cotton, khaki, proofed, for motor hoods ..	Saleable.
„	48	Jaconet cloth, grey.	
„	49 C	Waste, cotton, white, for axle box packing ..	
„	50	Waste, cotton, white No. 1 B for cleaning high class machinery.	
„	51 A	Waste, cotton, coloured, for cleaning machinery ..	
„	52	Waste, cotton, white or coloured, No. 2 for cleaning ordinary machinery.	
„	53 G	Drill, cotton, dyed, extra heavy, heavy, medium and light qualities (shades other than khaki) ..	Saleable.
„	54 E	Drill, cotton, bleached heavy, medium and light qualities	Saleable.
„	55 D	Drill, cotton, khaki, heavy, medium and light qualities	Saleable.
„	63	Webbing cotton khaki	
„	64	Kullahs.	
„	65 A	Dosuti, bleached.	
„	68 C	Cloth, cotton, table, bleached	Saleable.
„	69 A	Sheeting unbleached.	
„	70 C	Sheets, cotton bed, unbleached	Saleable.
„	71	Lungies with headings of gold thread.	
„	73 B	Lungies, ordinary	
„	75 B	Napkins, cotton, table, bleached	Saleable.
„	78 B	Gabardine, cotton, blue black	Saleable.
„	81	Pliable sheets of cotton canvas	
„	83 B	Drill, cotton, grey	Saleable.
„	85 C	Towels, hand honeycomb, bleached	Saleable.
„	87 B	Towels, bath, Turkish bleached	Saleable.
‡ „	88 A	Tape, cotton, white, unbleached (for sealing of railway wagons)	
„	89	Umbrellas.	

TEXTILES G—*contd.*

Specification No.	Description.	Remarks.
G/Tex/C-91 A	Capes with hood, waterproof.	
" 92 B	Canvas, cotton, green, proofed	Saleable.
" 93 A	Webbing, cotton white and coloured	
" 94 B	Cloth, ticking, unbleached	Saleable.
" 96 A	Coats, waterproof	
" 98	Sheets, bed, bleached	
" 99	Bags for carrying air mail	
" 101 D	Jerseys (banians), cotton, unbleached	Saleable.
" 102	Cloth, Bedford cord, khaki	
" 105	Muslin, white, bleached (cambric)	
" 108	Curtains, mosquito	
" 109 A	Stockings, cotton dyed..	Saleable.
" 110	Kharooa cloth	
" 111 B	Canvas, cotton, white	Saleable.
" 112 A	Cotton canvas, khaki, waterproofed for hoods (1st quality)	Saleable.
" 114 A	Wicks, cotton, flat, suitable for kerosene oil (other than signal lamp wicks)	Saleable.
" 124 B	Waste, cotton, white, superior, for axle box packing	Saleable.
" 125 B	Waterproof cape (ground sheet) with a detachable hood	
" 127 B	Wicks, cotton, flat, suitable for castor oil	Saleable.
" 129 B	Sponge cloth	Saleable.
" 130 A	Twill, cotton, striped (bleached)	Saleable.
" 131 A	Cloth, cotton, waterproof, khaki, double fabric, interlined with rubber	Saleable.
" 132 A	Coir yarn, 2 ply	
" 139 B	Netting, cotton, mosquito and sand fly	
" 140 B	Cloth, cotton, plain, grey	Saleable.
" 141 A	Durries cotton	Saleable.
" 142 A	Gauze, cotton absorbent, bleached	Saleable.
" 143 A	Gauze, absorbent, bleached, for first field dressing ..	Saleable.
" 144	Fringes, cotton, dyed	
" 145 A	Flanelette, cotton, for lining	Saleable.
" 146 A	Cloth, cotton, pugri, bleached or dyed	Saleable.
" 149	Cotton, unginned (Kapas)	
" 150 A	Sheets, cotton, bleached (linen finished)	Saleable.
" 152	Cloth cotton, punkha fringe striped (red stripe on grey cotton ground)	
" 153 A	Boiler cloth	

Specification No.		Description.	Remarks.
		TEXTILES G—*contd.*	
		Flax.	
G/Tex/F-	1	Superintendent's camp bag, flax proofed canvas, (single) with locking arrangements	
„	2	Superintendent's camp bag, flax proofed canvas, (double) with locking arrangements	
„	4 B	Bags, nose	
„	5	Buckets, canvas, for ponies	
„	6 B	Planter's bag with locking arrangements (unproofed) and planter's bag (proofed) and with locking arrangements	
„	7 A	Canvas, flax	
„	8 E	Threads and twines, sewing, flax for upholstry works	Saleable.
„	34 B	Canvas, French	Saleable.
„	36 A	Canvas, flax 'C' grade (corr. No. 1 of Nov. 1934)..	Saleable.
„	37 A	Canvas, white, unproofed, flax hemp or all hemp, for carriage cushions and seats	
„	38 A	Canvas, staying	
„	45	Dowlas 54″ wide	
„	46 G	Paulins	
„	49 A	Tape, stay, linen	Saleable.
		Hemp.	
G/Tex/H-	2	Cordages and line, hemp	
„	3	Hemp, twine, English and Country for P. & T. Department	
„	6	Cash bags, tat putties	
„	7 A	Rope, manilla	
		(1) 'Special' quality	
		(2) 'Ordinary' (merchant quality)	Saleable.
		Jute.	
G/Tex/J-1A		Jute twine, 1 ply, 2 ply, 3 ply, 4 ply, 5 ply, and 6 ply	
„	12 B	Jute bags unproofed for lineman tools	
„	22 B	Flax or jute mail bags, proofed and unproofed ..	
„	23 B	Jute paulins	
„	37 A	Jute bags, 'B Twill', 44″ × 26½″	Saleable.
„	38	Gunny cloth for oil pressing	
		Miscellaneous.	
G/Tex/Misc.	7	Lace, gold	
„	25	Braid lace and fringes, gold	
‡ „	27 C	Imitation leather cloth	
„	30	Carpets, Axminister	
„	41 B	Matting, coir	Saleable.
„	42 A	Mat, door, pile, coir	Saleable.
„	43 A	Garments, rubber, waterproof	
„	44	Stuffing, materials for mattresses (Coir, kopak, cotton)	
„	45 A	Twines, cotton, jute, hemp and flax	Saleable.
„	47	Linoleum	

Specification No.	Description.	Remarks.
	TEXTILES G—*contd.*	
	Tents and tent materials.	
G/Tex/T- 1 A	General specification for tent components.	
„ 2	Swiss cottage tent, square ended.	
„ 3	Hill tent.	
„ 4	Tehsildar's tent.	
„ 5	Raoti tent, single fly.	
„ 20 A	Tent necessary	
„ 21	Miniature swiss cottage tent (round ended) ..	
„ 22	Indian officers tent (double fly)	
„ 23	Kashmir tent, round ended	
„ 24	Tents, square ended, forest officer's pattern ..	
„ 40	Servant's pals or shouldaries	
„ 41 A	Light field service tents, 80 lbs.	
„ 42 A	Field officer's Kabul pals	
„ 43 A	General service tents	
„ 44	Sowar pal, square ended	
„ 45 A	Survey pal, square ended	
„ 46 B	Half pal tents and full pal tents	
„ 47	Mountain battery tents	
„ 48	Sleeping pal	
„ 49	Hudson Raoti tent	
„ 50	Shooting pal (or double fly sleeping pal) with bath-room	
„ 51	Tents d'abre	
„ 52	Light bath tent	
* „ 53	Staff officer's field service tent (rope ridge) ..	
	Woollen.	
G/Tex/W- 1	Wool, black and mixed, for blankets. (Add. No. 1 of January 1935).	
„ 3 B	Drawers, worsted	Saleable.
„ 4 B	Caps, balaclava, worsted	Saleable.
„ 5 D	Jackets, cardigan, woollen	Saleable.
„ 6 D	Putties, woollen, khaki or blue.	
„ 7 D	Cloth, bunting, woollen, white and coloured ..	Saleable.
„ 8 B	Serge blue, medium quality and broad cloth. (Add. No. 1 January 1935).	
„ 9 B	Serges of superior quality. (Add. No. 1, January 1935)	
„ 10 B	Cloth, Oxford, woollen, grey (Add. No. 1 of Feb. 1935)	Saleable.
„ 11 B	Flannel, silver grey. (Add. No. 1 of Feb. 1935) ..	Saleable.
„ 13	Packing woollen yarn for main motor and suspension bearings	
„ 16 B	Flannel, white for bandages. (Add. No. 1 of January 1935).	
„ 18	Serge blue for shore and sea service. (Add. No. 1 of January 1935).	
„ 19	Serge, khaki. (Add. No. 1, January 1935).	

Specification No.	Description.	Remarks.
	TEXTILES G—*concld.*	
G/Tex/W-20 C	Socks, worsted, blue, grey (Corr. No. 1 of December 1933)	Saleable.
" 21 D	Yarns, woollen	Saleable.
" 22 B	Serges blue for Indian State Railways (Add. No. 1 of Jan. 1935).	
" 23 B	Broad cloth, woollen (Add. No. 1, Jan. 1935) ..	
" 24	Flannel, green, superior quality (Add. No. 1, Jan. 1935)	
" 25	Serges of various shades for lining (Add. No. 1, Jan. 1935)	
" 26	Flannel, Angola (union) grey (Add. No. 1, Jan. 1935)	
" 29	Blankets, saddle.	
" 30 C	Blankets, woollen, maroon and scarlet	Saleable.
" 31 B	Blankets, woollen, ordinary	
" 32 C	Blanket cloth for clothing staff of railways and civil departments, (Add. No. 1, Jan. 1935) ..	
" 34	Yarn similar to Illingsworths Thrums for packing bearing boxes of axle generators on electric freight locomotives.	
‡ " 36 E	Jerseys, woollen	Saleable.
" 51 A	Cloth, woollen twill khaki	Saleable.
" 52 C	Felt, woollen, white, grey or dyed	Saleable.
" 53	Numdahs felt, for saddles.	
" 55	Bannians, flannel, blue grey.	
" 56 C	Trimming worsted white for use in oil cups on locomotives.	
" 63	Cloth, greatcoat, woollen. (Add. No. 1, Jan. 1935)..	
" 64	Yarn, packing, worsted white for packing bearings of electric locomotives	

---

* Specifications framed during the year.

† Specifications framed and revised during the year

‡ Specifications revised during the year.

List of Indian Stores Department Special Specifications current at the end of the year 1933-34.

Specification No.	Description.
	BRIDGE WORK.
A-31	Standard mobilization steel hutting (M. W. services).
A-32	Steel and iron work required by the Indian Public Works Department, Delhi, for the roofing of the Assembly, the Council of State and the Council of Princes' Chambers and Library of the New Legislative Buildings, Imperial Delhi.
A-36	Special construction quarters (portable hutting), for the Lloyd Barrage Project.
A-52	Aeroplane hangar.
	ENGINEER'S PLANT.
B-48	Portable steam pumping engine equipment and hose pipe for the Bikaner Canal, Punjab.
B-49	Crane, one 7-ton Scotch hand derric for the Irrigation Department, Punjab.
B-51	Portable hand, 5-ton operated crane for 5′–6″ gauge railway track.
B-52	Scotch hand derrick crane constructed of steel.
B-54	Steam boilers for M. E. S.
	BALLAST AND PERMANENT-WAY.
D-3	Light railway track, turnables and trucks, for military purposes.
	ROLLING STOCK.
E-30	Metre gauge steam rail motor with goods truck and goods trailer truck for the Sutlej Valley Project, Punjab Public Works Department.
E-31	Steam locomotives, 2′ 0″ gauge, for the Sutlej Valley Project Bikaner Canal, Punjab Public Works Department.
E-40	Steam locomotives, 2′ 0″ gauge, for the Sukkur Barrage Project.
	BUILDING.
G/Buildings 1-A	Ordnance Tin Tents.
	CHEMICALS.
*G/Chemicals 33	Acid, Sulphuric, Commercial 82 per cent. for the P. and T. Department.
	LAMPS AND LAMP FITTINGS.
G/Lamps 11	R. M. S. folding candle lantern for the P. and T. Department.
„ 16	Brass sealing lamp for the P. and T. Department.
„ 23	Table lamps, hanging lamp and hurricane lantern, for Director General P. and T.
„ 24	Incandescent hurricane or hanging lantern, petrol pressure type, for the P. and T. Department.
	LEATHER AND RUBBER.
G/Leather 44	Waist, belt, leather, for P. W. D., Punjab.
„ 45	Meshas.
„ 47-A	Boots, ankle (followers).
„ 49	R. M. S. portfolio (G. pattern).
„ 50	Portfolio with lock, supervising officer (for P. and T. Department).
„ 51	R. M. S. Leather portfolio fitted with compartments for stamps, seals, etc.
„ 52	Leather belts for G. I. P. Railway.
„ 53	Derby shoes, black or brown, for E. I. Railway (Crew staff).

Specification No.		Description.
G/Leather	56-B	Boots, ammunition, for police constables.
,,	57	Leather goods for Police Department.
,,	58-A	Rubber pilot balloons for air observations for the Indian Meteorological Department.
,,	60	India rubber feed pipes.
,,	62	Lace, leather for belting for G. I. P. Railway.
		METALS.
G/Metals	47	Antifriction metal, high grade and low grade, for the Military Engineer Services.
,,	72	M. S. sheets for the Telegraph Department.
		MISCELLANEOUS.
G/Misc.	3-A	Kit boxes for sea service for M. E. S.
,,	4-A	Double security bond boxes and stamp boxes for the P. and T. Department.
,,	5	Despatch boxes for the Post Master General, Bombay.
,,	6-A	Safes for the D. G., P. and T. Department.
,,	7-A	Tin box for insurance seal types and tin box for stamp types for R. M. S.
,,	8	Lead seals for Posts and Telegraphs Department.
,,	9-A	Clocks and time-pieces for the P. and T. Department.
,,	10	Tin trays to hold Rs. 1,000 and Rs. 500 for the P. and T. Department.
,,	11-A	Badges, brass, for the P. and T. Department.
,,	12	Letter box for the P. and T. Department.
,,	13	Punching machine for the Posts and Telegraphs Department.
,,	14	Spear head with brass bells for the P. and T. Department.
,,	16	Tin sheets for the P. and T. Department.
,,	17	Brush sweeping.
,,	18	Brush for painting letter boxes.
,,	19-A	Brush for cleaning stamps.
,,	20	Wooden block for label for the P. and T. Department.
,,	21-A	Enamelled sheet, steel signboards letter, box plates, etc., for the P. and T. Department.
,,	22-A	Button, brass gilt for the P. and T. Department.
,,	23	Tin seal holder for the P. and T. Department.
,,	26-B	Crumps, adjustable, proportional modules, for Irrigation Department, Punjab.
,,	33	Lead seals for the Controller of Currency.
,,	45	Brass padlocks, box locks, drawer or almirah locks for iron safes and special locks, for the P. and T. Department.
,,	46	Scales and weights for the P. and T. Department.
,,	47	Fireclay for the N. W. Railway.
,,	49	Hose, flax canvas, for Railways.
,,	50	Hose, India Rubber, delivery, armoured, 2½″ bore for E. I. Railway.
,,	60	Bedsteads, all metal, Army Hospital Pattern, Mark I.
* ,,	64	Glass, plate and sheet for Railways.
* ,,	65	Bicycles, Hercules single and double bar for Government Departments.
		OILS, LUBRICANTS, ETC.
G./O.P.	43	Oils for use of Government Telegraph Department.
,,	67-A	Wood tar.

Specification No.	Description.
G/O.P. 152	Oil, lubricating, crank chamber, high speed steam engine No. 2, for Bengal Nagpur Railway.
	PAINTS AND PAINTER'S MATERIALS ETC.
* G./P. 301	Green paint, special, readymixed to E. B. Railway shade.
	TOOLS.
† G/Tools 4A	Shovels for use on the Indian State Railway.
	WATER-WORKS STORES.
G/W. W. 31	Wrought iron or mild steel pipes for water for the Bikaner Canal.
" 51-A	89,000 c. ft. of rising main, special, sluice valves, air valves, etc., from Ramgarh to Jaipur for the Water supply scheme for the Jaipur State, P. W. D.
" 52	Distribution piping, specials, valves and accessories for the water supply scheme for the Jaipur State, P. W. D.
" 53	Piping specials, valves and accessories for water supply, P. W. D., New Delhi.
	ELECTRICAL PLANT AND MATERIALS.
H-59	One switchboard generator panel for Ambala.
H-74 B	Zinc, circular, special design, moulded for electric cells.
H-88	Belting for train lighting dynamos for Indian Railways.
H-89 B	Broad and metre gauge carriage fans for Indian State Railways.
H-99	Sack elements for Leclanche cells for G. I. P. Railway.
H-100	Sac Negative elements size 1 and 2 for E. I. Railway.
H-101	Switchboard Ironclad A. C. Pillar type for G. I. P. Railway.
H-102	Sub-station Kiosk type for G. I. P. Railway.
†H-104A	Cables bazar, 400 volts, multicore, insulated, single wire armoured for P. W. D. Electricity Branch, Punjab.
*H-105	Insulators for P. W. D. Electricity Branch Punjab.
*H-106	Hot galvanising for P. W. D. Electricity Branch, Punjab.
*H-107	Electorodes for use on M. S. Bridgework for N. W. Rly.
*H-108	Cables 230 volts twin core, insulated, single wire armoured domestic service leading-in cables for P. W. D., *Electricity Branch*, Punjab.
*H-109	Conductors, solid and stranded, copper and cadmium copper, for P. W. Electricity Branch, Punjab.
*H-110	Inter-carriage electric couplers and cables for Broad Guage Coaching stock for N. W. Railway.
*H-111	Cables, telephone, underground, for P. W. D., Electricity Branch Punjab.
*H-112	Poles, tubular, steel, and its accessories for P. W. D. Electricity Branch, Punjab.
*H-113	Inter-carriage electric couplers for Broad gauge coaching stock for N. W. Railway.
	POWER AND INDUSTRIAL PLANT.
P. I. 26	Jolly boat.
P. I. 27	Heave-up boat for the Lloyd Barrage Works, Sukkur.
P. I. 28	Heave-up boat for the Lloyd Barrage Works, Sukkur.
P. I. 37	Dredgers (grab type).
P. I. 41	Pile driver and frame for the Sutlej Valley Project.

Specification No.	Description.
	POWER AND INDUSTRIAL PLANT—*contd.*
P.I. 46	Steam and exhaust piping for the Nalagarh Power House.
P.I. 47	Two 25 K. W. oil engine driven generating sets and switchboard for the British Infantry Barracks, Lahore.
P.I. 48	Turbo-alternator set, condensing plant, cranes, boiler economiser pumps, steel chimney, steam and exhaust pipe work, switchboard motor converter set, rotary converters, substation plant, extra high tension feeder cables and auxiliaries, for the Public Works Department, Delhi.
P.I. 50	Concrete mixers and prime movers, required for the Bikaner Canal, Sutlej Valley Project.
P.I. 51	Stone breaker plant and screens for the Nalagarh Quarries, Sutlej Valley Irrigation Project.
P.I. 52	Generating plant, transformers, switchgear, pump and motors, for the Nalagarh Quarries Power Plant, Punjab Irrigation Department.
P.I. 53	Generating plant, transformers, switchgear, pump and motors, for the Ferozepore Division Power Plant, Punjab Irrigation Department.
P.I. 54	Concrete mixers with motors for the Sutlej Valley Project.
P.I. 55	One 53, 4 K. V. A. oil engine driven A. C. generating set with exciter for the Northern India Salt Revenue Department, Sambhar Lake.
P.I. 56	Switchgear for the Northern India Salt Revenue Department, Sambhar Lake.
P.I. 57	A. C. motor and control gear for the Government of India Press, Simla.
P.I. 58	A. C. motors, control gear, main switchpanel, cable work and wiring for the experiment spinning plant and Technological laboratory of the Indian Central Cotton Committee, Bombay.
P.I. 59	Two 4 K. W. oil engine-driven generating sets and switchboards for the Military Works Services, Nowshera Sub-District, Northern Command.
P.I. 63	Passenger, goods and service lifts, required by the P. W. D., for the New *Legislative* Buildings, Delhi.
P.I. 64	Passenger, goods and service lifts, required by the P. W. D., for Government House, Delhi.
P.I. 66	Oil engine alternator set, water cooling plant, crane, switchgear and cables for power station; transformer switchgear and cables for a sub-station for the Lloyd Barrage Works, Sukkur.
P.I. 70	Oil engine dynamo set, main fuel tank complete with pipework, water cooling plant, crane, switchgear and cables for power station and motors, control gears and cables for the press machinery for the Government Postal Press, Aligarh.
P.I. 78	Additional oil engine alternator sets, water cooling plant, transformers, switchgear and cables for the Power Station of the Lloyd Barrage Works, Sukkur.
P.I. 79	Concrete blockyard plant for the Lloyd Barrage Project, Sukkur.
P.I. 83	325 K. W. oil engine alternator sets, water cooling plant, oil fuel storage tank complete with pipework, crane transformers, switchgear, and connecting cables, induction motors, E. H. T. feeder cables and accessories for Power Station and Miscellaneous plant, for Salt Mines, Khewra.

Specification No.	Description.
	POWER AND INDUSTRIAL PLANT—*contd.*
P.I. 84	Goods lifts for Postal Press, Aligarh.
P.I. 85	Electrically driven pumping machinery mounted on pontoons for dewatering coffer dams for the Lloyd Barrage Works, Sukkur.
P.I. 86	Oil engine driven power plant for the New Power Station, Municipal Board, Mussoorie.
P.I. 87	Plant for Hydro-electric scheme, Municipal Board, Mussoorie.
P.I. 88	Oil engine driven power station for Jaipur.
P.I. 89	Pile driving plant mounted on pontoons for the Lloyd Barrage Works, Sukkur.
P.I. 90	Scotch derrick crane motor driven, to lift 25 and 10 tons, on pontoons for the Lloyd Barrage Works, Sukkur.
P.I. 91	Steam driven paddle tugs for the Lloyd Barrage Works, Sukkur.
P.I. 92	Barges for the Lloyd Barrage Works, Sukkur.
P.I. 93	Oil engine driven (diesel) Bucyrus dragline excavators, 30 B, for the Lloyd Barrage Works, Sukkur.
P.I. 94	Oil engine driven (diesel) Bucyrus dragline excavators, 50 B, for the Lloyd Barrage Works, Sukkur.
P.I. 96	Electrical plant for P. W. D., Punjab.
P.I. 97	30-B diesel engine driven Bucyrus dragline excavator for the Lloyd Barrage Works, Sukkur.
P.I. 99	Steel barges of capacity up to 100 tons of stone for the Lloyd Barrage Works, Sukkur.
P.I. 100	50-B diesel engine driven Bucyrus dragline excavator for the Lloyd Barrage Works, Sukkur.
P.I. 101	Sluice gates for the Panjnad Barrage on the river Sutlej, thirty-three gates, clear width of opening 60′—0″, 18′—6″ deep for Punjab Public Works Department.
P.I. 102	Gates for the undersluices for the Weir across the river Damodar.
P.I. 103	250 K. W. 2300 volts full diesel oil engine alternator sets for the P. W. D., Simla.
P.I. 104	One 600 K. W. 3,300 volts, oil engine alternator set, oil fuel service tanks, etc., for additional power station, Jaipur P. W. D.
P.I. 105	Steel barges of capacity up to 100 tons of stone for Lloyd Barrage Works, Sukkur.
P.I. 107	Three 200 K. W. 400 volts water turbine alternator sets, etc. *for the* Sumera Hydro-Electric Pumping and Power Scheme *for the* P. W. D., United Provinces.
P.I. 108	Radial gates for the head and cross regulators for main canal and branches of the Lloyd Barrage and Canal Construction, Sind.
P.I. 109	Sluice gates, vertical sliding and radical types for small branches, distributions and minors of the Lloyd Barrage and Canal Construction, Sind.
P.I. 115	Sea-going steam lighter for Forest Department, Port Blair.
P.I. 117	Pumping plant, oil engine driven, tube with turbine, for N. W. Railway.
P.I. 118	Pumping plant, oil engine driven, centrifugal, for N. W. Railway.

Specification No.	Description.
	POWER AND INDUSTRIAL PLANT—*concld.*
P.I. 119	Pumping plant, oil engine driven Air-lift *cum* centrifugal, for N. W. Railway.
P.I. 123	Pumping plant, electrically driven, Air-lift *cum* centrifugal, for N. W. Railway.
P.I. 125	A. C. motor and control gear for driving pumping plant for N. W. Railway.
P.I. 126	Control gear for the control of induction motors, for N. W. Railway.
P.I. 127	Pumps, centrifugal, A. C. motor driven, for N. W. Railway.
P.I. 129	Motor alternator set with testing transformer and induction regulator for the Government Test House Alipore, Calcutta.
	TEXTILES.
G/Tex/C-4	Cotton canvas brown for O. & R. Railway.
" 17 B	Capes with hoods, waterproof, for the Postal Department.
" 25	File bundling sheet of blue drill for the P. and T. Department.
" 26 A	Khaki drill sacks, postman's, for the P. and T. Department.
" 27 B	Waterproof khaki drill, delivery bag, for the P. and T. Department.
" 29	Clothing materials for the use of the staff of the P. and T. Department.
" 32	Cape with hood, waterproof, for Bombay Police.
" 72	Dosuti, grey, for Borstal Institute, Lahore.
" 74	Turbans, khaki, for G. I. P. Railway staff.
" 76	Dosuti, khaki, for N. W. Railway.
" 77	Dosuti, grey, for E. I. Railway.
" 79 B	Lungies, ordinary, for Sind Police.
" 84	Grey drill, unbleached, for Borstal Institute, Lahore.
" 86	Sheeting, grey, for Borstal Institute, Lahore.
" 97	Dosuti, grey (heavy quality) for Railways.
" 103 B	Sheets, bed, bleached, for Indian State Railways.
" 107	Flashes and belts for E. I. Railway.
" 113	Shorts and blouses, khaki, for G. I. P. Railway.
" 115	Red flags with letter P. W. D. for roads under repair.
" 116 C	Badge cloth, embroidered C. and W. for N. W. Railway.
" 117	Ground sheets, waterproofed, for prisons, Burma, Bihar and Patna.
" 118	Long cloth, bleached, for Government Printing and Stationery Department, Burma.
" 119	Cloth, Holland, for N. W. Railway.
" 120	Canvas cotton, black, for N. W. Railway.
" 121	Bags, waterproof, for clearance of outside letter boxes.
" 122	Long cloth, bleached, for overalls, for E. I. Railway.
" 126	Bags kit, canvas, cotton, white, for Madras Police.
" 128	Bags, dosuti, cotton, for the Opium Factory, Ghazipur.
" 147	Covers, slip, for Mattresses for E. I. Railway.
" 148	Lace (tape), cotton, yellow, for Bombay City Police.
" 151	Cloth, cotton, Mazri, for Zhob Militia.

Specification No.	Description.
	TEXTILES—*contd.*
*G/Tex/C-154	Canvas cotton khaki, unproofed for the upper sides of carriage cushions for E. B. Railway.
G/Tex/F-48	Waterproof sheets for blankets for Assam Police.
G/Tex/J-33 A	Hand bags for R. M. S. sorters.
„ 34	Canvas, jute, unproofed, for I. G. Police, Madras.
„ 35	Felt, tarred, jute, for N. W. Railway.
G/Tex/Misc. 1	Waist and shoulder belts of red broad cloth for Postal Department.
„ 2 I	Summer uniforms for the E. I. and E. B. Railway staff.
„ 3 H	Winter uniforms for E. I. and E. B. Railway staff.
„ 24	Clothing material for Government of India menial staff.
„ 26 A	Belt, lace, for the N. W. Railway.
‡„ 28 C	Textile materials for Government Printing and Stationery Department, Imperial and Provincial.
„ 40	Gold lace for the uniforms of Government of India menial staff.
„ 46 A	Uniforms for G. I. P. Railway staff.
G/Tex/W-12	Mittens for N. W. Railway.
„ 14 A	Broad cloth, dark blue, for Bombay Police.
„ 15	Serge, white, for Medical and Veterinary Department.
„ 17 A	Greatcoats with capes for mounted and foot police, Sind.
„ 28 B	Blankets, woollen, for G. I. P. Railway menial staff.
„ 38 A	Greatcoats with capes for Salt and Excise Department, Sind.
„ 39	Serge, khaki, for G. I. P. Railway.
„ 41	Serge, grey, for E. I. Railway.
„ 50	Drab mixture greatcoat cloth for I. G. Prisons, Bombay.
„ 57	Greatcoat cloth, khaki, for the Assam Police, 1, 2 and 4 Assam Rifles.
„ 58	Kambalies, woollen, for Bombay Forest Department.
„ 60	Greatcoats, foot and mounted types, for the Railway Police, Rajputana.
„ 61	Blue grey hosiery worsted yarn for the Jail Department, Burma.
„ 62	Lohies, natural grey, for the P. & T. Department, Kashmir.
„ 65	Buntings for R. I. M. Dockyard, Bombay.
„ 66	Serges, blue, superior for N. W. Railway.

* Specifications framed during the year 1934-35.

† Specifications framed and revised during the year 1934-35.

‡ Specifications revised during the year 1934-35.

APPENDIX XIII.

Statement showing the work done by Inspection Branch.

Value and tonnage of stores inspected, number of tests and analyses carried out and the amount of fees earned.

(*Vide* paragraphs 3, 43, 50 and 54 of the Report.)

—	Value of stores inspected and charged on value.				Tonnage of stores inspected and charged on weight.				Number of tests and analyses carried out.				Fees earned.			
	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1932-33.	1933-34.	1934-35.
	Rs.	Rs.	Rs.	Rs.	Tons.	Tons.	Tons.	Tons.					Rs.	Rs.	Rs.	Rs.
Calcutta Inspection Circle ..	3,05,42,816	1,92,56,370	2,48,89,624	3,11,28,964	1,11,595	11,394	36,938	52,303	..	..	..	..	4,50,544	2,11,864	3,03,866	3,84,820
Bombay Inspection Circle ..	66,90,637	64,14,694	77,14,048	95,11,455	2,496	261	560	415	..	..	..	..	72,445	64,741	78,372	96,212
Karachi Inspection Circle ..	42,63,092	33,48,090	39,88,069	46,51,504	2	..	..	..	..	..	..	..	42,634	33,481	39,881	46,515
Upper India Inspection Circle	37,85,681	30,59,618	45,36,463	41,51,288	..	..	..	..	..	..	..	..	37,990	30,596	45,539	41,590
Cawnpore Inspection Branch	20,76,382	14,64,723	15,45,864	16,36,439	..	..	..	..	..	..	..	..	20,764	14,691	15,497	16,383
Madras Inspection Branch ..	7, 1,770	13,27,245	16,27,914	14,22,417	..	..	..	..	..	..	..	..	7,618	13,272	16,279	14,224
Total Provincial Inspectorates	4,81,20,378	3,48,70,740	4,43,01,982	5,25,02,067	1,14,093	11,655	37,498	52,718	..	..	..	..	6,31,995	3,68,645	4,99,434	5,99,744
Metallurgical Inspectorate ..	3,01,489	5,36,869	3,63,523	11,33,588	1,96,411	1,44,548	2,17,335	2,71,144	6,345	4,466	8,019	8,184	2,31,434	1,80,841	2,46,518	3,46,060
Government Test House, Alipore	..	..	..	..	..	..	..	..	7,892	7,046	7,480	8,413	1,78,564	1,60,706	1,69,934	1,97,977
Government Test House, Bombay	..	..	..	..	..	..	..	..	164	..	..	..	3,573	..	..	..
GRAND TOTAL ..	4,84,21,867	3,54,07,609	4,46,65,505	5,36,35,655	3,10,504	1,56,203	2,54,833	3,23,862	14,401	11,512	15,499	16,597	10,45,566	7,10,192	9,15,886	11,43,781
Deduct tests carried out for the Indian Stores Department.									3,731	3,891	4,627	5,163	84,687	76,208	90,094	1,01,755
Net Total ..									10,670	7,621	10,872	11,434	9,60,879	6,33,984	8,25,792	10,42,026

APPENDIX XV.

Statement showing inspection work carried out for various authorities which is charged on weight.

(*Vide* paragraphs 3, 43, 50 and 54 of the Report.)

Authorities on whose behalf stores were inspected.	Calcutta Inspection Circle.				Bombay Inspection Circle.				Karachi Inspection Circle.			
	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1932-33.	1933-34.	1934-35.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1. Central Government Departments, Civil ..	..	..	..	..	..	..	..	..	..	..	..	..
2. Central Government Departments, Military	..	..	..	..	..	..	..	..	..	..	..	..
3. Railways, State-worked	47,186	9,040	27,483	40,087	2,199	..	..	..	2	..	..	..
4. Railways, Company-worked	61,197	1,908	9,186	10,849	..	..	..	..	..	..	..	..
5. Railways, worked by Indian States ..	..	..	..	313	..	..	..	2	..	..	..	..
Total Railway Administrations ..	1,08,383	10,948	36,669	51,249	2,199	..	..	2	2	..	..	..
6. Provincial Governments	..	197	12	404	..	..	..	..	..	..	..	..
7. *Quasi*-Public bodies ..	..	54	..	..	182	..	..	..	..	..	..	..
8. Private concerns and Indian States ..	2,058	147	43	133	115	261	560	413	..	..	..	..
9. Foreign Governments and public bodies ..	1,154	48	214	517	..	..	..	..	..	..	..	..
Total ..	1,11,595	11,394	36,938	52,303	2,496	261	560	415	2	..	..	..

Authorities on whose behalf stores were inspected.	Total Provincial Inspectorates.				Metallurgical Inspectorate, Tatanagar.				Total tonnage of stores inspec[ted] and charged on weight.			
	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1932-33.	1933-34.	193
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	T
1. Central Government Departments, Civil ..	..	..	.	..	..	..	..	..	..	..	..	
2. Central Government Departments, Military	..	..	.	..	..	..	..	10	..	..	..	
3. Railways, State-worked	49,387	9,040	27,483	40,087	31,799	26,437	25,195	79,116	81,186	35,477	52,678	1,19
4. Railways, Company-worked	61,197	1,908	9,186	10,849	25,983	15,626	15,092	14,874	87,180	17,534	24,278	25
5. Railways, worked by Indian States ..	..	..	..	315	1,600	1,800	1,557	26	1,600	1,800	1,557	
Total Railway Administrations ..	1,10,584	10,948	36,669	51,251	59,382	43,863	41,844	94,016	1,69,966	54,811	78,51.	1,4
6. Provincial Governments	..	197	12	404	..	33	..	..	..	230	12	
7. *Quasi*-Public bodies ..	182	54	..	..	..	..	..	..	182	54	..	
8. Private concerns and Indian States ..	2,173	408	603	546	1,37,029	1,00,652	1,75,491	1,77,118	1,39,202	1,01,060	1,76,094	1,7
9. Foreign Governments and public bodies ..	1,154	48	214	517	..	..	..	..	1,154	48	214	
Total ..	1,14,093	11,655	37,498	52,718	1,96,411	1,44,548	2,17,335	2,71,144	3,10,504	1,56,203	2,54,833	3,2

APPENDIX XVI.

*Statement showing the number of tests and analyses carried out for **various** authorities.*

(*Vide* paragraphs 3, 50 and 54 of the Report.)

Authorities on whose behalf tests, analyses, etc., were carried out.	Metallurgical Inspectorate, Tatanagar.				Government Test House, Alipore.				Government Test House, Bombay.	Total number of tests and analyses carried out.			
	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1932-33.	1933-34.	1934-35.	1931-32.	1931-32.	1932-33.	1933-34.	1934-35.
For the Indian Stores Department	12	44	24	22	3,561	3,847	4,603	5,141	158	3,731	3,891	4,627	5,163
Outside authorities—													
1. Central Government, Civil.	..	36	16	3	270	205	143	158	..	270	241	159	161
2. Central Government, Military.	..	..	2	1	616	491	539	403	..	616	491	541	404
3. Railways, State-worked..	74	52	66	29	750	411	491	451	..	824	463	557	480
4. Railways, Company-worked.	9	6	20	72	129	217	169	307	..	138	223	189	379
5. Railways worked by Indian States.	37	..	..	2	78	70	38	47	..	115	70	38	49
Total Railway Administrations.	120	58	86	103	957	698	698	805	..	1,077	756	784	908
6. Provincial Governments	8	12	11	4	548	297	140	322	..	556	309	151	326
7. *Quasi*-Public bodies ..	..	..	..	3	115	94	136	97	..	115	94	136	100
8. Private concerns and Indian States.	6,205	4,316	7,880	8,048	1,825	1,414	1,221	1,487	6	8,036	5,730	9,101	9,535
Total ..	6,345	4,466	8,019	8,184	7,892	7,046	7,480	8,413	164	14,401	11,512	15,499	16,597

APPENDIX XVII.

Statement showing the various articles tested at the Government Test House during the 1934-35.

(*Vide* paragraphs 3 and 54 of the Report.)

Serial No.	Articles.	Serial No.	Articles.
1	Acids.	39	Concrete.
2	Accumulators.	40	Coppers, bars, plates, etc.
3	Aluminium ferric.	41	Cordages, cotton, flax & jute.
4	Aluminium sulphate.	42	Cotton absorbent.
5	Aluminium wire.	43	Deposits.
6	Ammonium chloride.	44	Disinfecting fluid.
7	Antimony.	45	Draft yoke.
8	Apparatus, flash point.	46	Electrolyte.
9	Asphalt.	47	Extinguishers, fire.
10	Bandage.	48	Fabrics, cotton.
11	Barley.	49	Fabrics, jute.
12	Batteries.	50	Fabrics, woollen.
13	Bauxite.	51	Fans and regulators.
14	Beam equalising.	52	Ferro-chrome.
15	Beltings, cotton, hair and jute.	53	Files, of sorts and sizes.
16	Benzene & petrol.	54	Fittings, A. V. B.
17	Bitumen.	55	Gas, carbon dioxide.
18	Bleaching powder.	56	Gauges, pressure, steam & vacuum.
19	Boiler compound.	57	Gauge, wire.
20	Braids, cotton.	58	Graphite.
21	Brass.	59	Grease, lubricating.
22	Bricks.	60	Gunny packing.
23	Buckets, G. I.	61	Handcuffs, steel.
24	Cables.	62	Hooks, drawbar.
25	Cakes, oil vegetable.	63	Iron, bars, plates, etc.
26	Calcium carbide.	64	Ink, writing.
27	Candles, wax.	65	Insecticide.
28	Canvas.	66	Jellies, petroleum.
29	Cells.	67	Keys, steel.
30	Cement.	68	Knives.
31	Chains.	69	Lamps, electrical.
32	Chemicals.	70	Latinite.
33	Clay, China fire.	71	Lead, ingots, sheets.
34	Cloth, imitation leather.	72	Leather.
35	Coal.	73	Leather belting.
36	Coal tar.	74	Linoleum.
37	Coil spring.	75	Lime.
38	Coke.	76	Manganese.

Serial No.	Articles.
77	Manure.
78	Masonite.
79	Metals, anti-friction.
80	Meters, electric.
81	Miliameter.
82	Milk, malted.
83	Mortar.
84	Mud.
85	Nails.
86	Nickle.
87	Oil creosote.
88	Oil fuel.
89	Oil kerosene.
90	Oil lubricating.
91	Oil vegetable.
92	Paints and pigments.
93	Paper packing.
94	Pipes, hose A. V. B.
95	Pipes, hose, canvas.
96	Pipes, hose, galvanised.
97	Pipes, hose, I. R.
98	Pipes, stoneware.
99	Pitch.
100	Plug.
101	Plumbago.
102	Pole, tubular steel.
103	Polishes, French.
104	Polishes, leather.
105	Polishes, metal.
106	Preservative wood.
107	Rail anchors.
108	Rail steel.
109	Reviver, leather.
110	Rivets.
111	Ropes, metallic.
112	Ropes, non-metallic.
113	Rosin.
114	Sac elements.
115	Salt.
116	Sand.
117	Sati food.
118	Scissors.
119	Screw coupling.
120	Sediment.
121	Seeds, vegetable.
122	Shackles.
123	Sheets, corrugated asbestos.
124	Shellac.
125	Silica.
126	Slag boulder.
127	Sleepers.
128	Soap.
129	Sockets, galvanised.
130	Soda ash.
131	Solder.
132	Spanners.
133	Spirit.
134	Springs, buffer.
135	Springs, I. R.
136	Strappings, steel.
137	Starch.
138	Steel, bars, plates, etc.
139	Stone.
140	Sulphate of alumina.
141	Sulphate of copper.
142	Sulphur.
143	Tallows, lubricating.
144	Tapes, cotton.
145	Thermometer.
146	Threads, cotton, silk.
147	Tin, ingots, sheets.
148	Tubes, steel.
149	Turpentine.
150	Twines, cotton, flax, jute.
151	Valves, sluice.
152	Varnishes.
153	Ventilators, Rly. carriages.
154	Water.
155	Wax, bees.
156	Wax, sealing.
157	Wires.
158	Yarns, cotton, silk.
159	Zinc.

Serial No.	Articles.
77	[illegible]
78	[illegible]
79	Metal, antifriction.
80	[illegible]
81	[illegible]
82	[illegible]
83	[illegible]
84	[illegible]
85	[illegible]
86	[illegible]
87	[illegible]
88	[illegible]
89	[illegible]
90	Oil, lubricating.
91	Oil, vegetable.
92	[illegible]
93	[illegible]
94	Pipes, [illegible]
95	Pipes, [illegible]
96	Pipes, iron, galvanized.
97	Pipes, [illegible]
98	Pipes, [illegible]
99	[illegible]
100	[illegible]
101	[illegible]
102	Pots, [illegible]
103	Pulleys, [illegible]
104	Pulleys, leather.
105	Pulleys, metal.
106	[illegible] wood.
107	[illegible]
108	[illegible]
109	[illegible], leather.
110	Rivets.
111	Rope, manila.
112	Rope, [illegible]
113	[illegible]
114	[illegible]
115	Salt.
116	Sand.
117	[illegible]
118	[illegible]
119	Screw couplings.
120	[illegible]
121	[illegible]
122	[illegible]
123	Sheets, corrugated galvanized.
124	[illegible]
125	[illegible]
126	Slag boards.
127	Sleepers.
128	Soap.
129	Sockets, galvanized.
130	Soda ash.
131	Solder.
132	Spanners.
133	Spirit.
134	Springs, buffer.
135	Springs, C. R.
136	[illegible]
137	Starch.
138	Steel, bars, plates, etc.
139	Stone.
140	Sulphate of alumina.
141	Sulphate of copper.
142	Sulphur.
143	Tallow, lubricating.
144	Tapes, cotton.
145	Thermometers.
146	Threads, cotton, silk.
147	Tin ingots, sheets.
148	Tubes, wood.
149	Turpentine.
150	Twines, cotton, flax, jute.
151	Valves, water.
152	Varnishes.
153	Ventilators, bldg, carriage.
154	Waste.
155	Wax, bees.
156	Wax, sealing.
157	Wire.
158	Yarns, cotton, silk.
159	Zinc.

APPENDIX XVIII.

Financial statement of the Receipts and Charges of the Indian Stores Department for the years 1931-32, 1932-33, 1933-34 and 1934-35.

(*Vide* paragraphs 7 and 71 of the Report.)

Particulars.	Amount.											
	1931-32.			1932-33.			1933-34.			1934-35.		
	Commercial.	Non-Commercial.	Total.	Commercial.	Non-Commercial.	Total.	Commercial.	Non-Commercial.	Total.	Commercial.	Non-Commercial.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. By 1% purchase fees ..	3,56,528	..	3,56,528	3,41,685	..	3,41,685	3,51,840	..	3,51,840	4,39,566	..	4,39,566
2. By 1% inspection fees ..	2,68,495	..	2,68,495	2,53,741	..	2,53,741	2,87,518	..	2,87,518	3,61,831	..	3,61,831
3. By recoveries on account of fees for tests, inspections, etc., made from Government Departments, Railways, private firms and individuals	6,17,281	99,492	7,16,773	2,95,721	81,343	3,77,064	4,43,340	73,615	5,16,955	5,79,028	97,079	6,76,107
4. By miscellaneous receipts ..	41,489	1,085	42,574	42,200	1,596	43,796	39,690	1,488	41,178	46,175	227	46,402
*5. By charges for tests, etc., adjusted between commercial and non-commercial branches of the Department ..	(a) 4,064	(a) 80,801	..	(a) 1,452	(a) 75,293	..	(a) 3,017	(a) 89,382	..	(a) 2,775	(a) 1,01,078	..
Total Receipts ..	12,87,857	1,81,378	13,84,370	9,34,799	1,58,232	10,16,286	11,25,405	1,64,485	11,97,491	14,29,375	1,98,384	15,23,906
1. Pay of Officers	6,02,816	1,40,315	7,43,131	5,23,027	1,18,347	6,41,374	5,33,579	1,22,220	6,55,799	5,77,429	1,17,318	6,94,747
2. Pay of Establishment ..	5,66,771	1,60,297	7,27,068	5,01,730	1,50,242	6,51,972	5,52,637	1,66,771	7,19,408	5,77,984	1,72,135	7,50,119
3. Allowances	1,66,417	24,723	1,91,140	1,63,245	26,861	1,90,106	1,52,340	24,209	1,76,549	1,58,489	21,196	1,79,685
4. Grants-in-aid	409	191	600	40	20	60	..	..	..	..	..	..
5. Supplies and Services—												
(a) Expenditure in India ..	39,692	36,408	76,100	27,573	19,941	47,514	49,485	16,913	66,398	61,368	30,655	92,023
Deduct amount treated as Capital Expenditure ..	443	1,338	1,781	742	7,727	8,469	1,592	3,413	5,005	1,431	16,498	17,929
Total ..	39,249	35,070	74,319	26,831	12,214	39,045	47,893	13,500	61,393	59,937	14,157	74,094
(b) Expenditure in England												
(i) On Stores	..	..	..	..	356	356	4,753	357	5,110	16	176	192
(ii) On inspections on behalf of non-commercial Civil Deptts. of the Central Government	11,122	..	11,122	157	..	157	148	..	148	240	..	240
Total Supplies and Services (excluding amount treated as Central Expenditure)	50,371	35,070	85,441	26,988	12,570	39,558	52,794	13,857	66,651	60,193	14,333	74,526
6. Contingencies	73,610	22,560	96,170	74,661	23,682	98,343	72,510	22,072	94,582	78,306	23,655	1,01,961
Deduct amount treated as Capital Expenditure ..	..	..	..	..	..	..	101	..	101	..	..	..
7. Works (including petty constructions and repairs) ..	7,159	2,593	9,752	8,763	2,619	11,382	7,907	2,281	10,188	7,659	5,562	13,221
Deduct amount treated as Capital Expenditure ..	108	..	108	1,619	..	1,619	205	150	355	582	..	582
Total ..	7,051	2,593	9,644	7,144	2,619	9,763	7,702	2,131	9,833	7,077	5,562	12,639
8. Loss or gain by exchange (included with the cost of stores in the Profit and Loss Account)	..	..	..	..	—3	—3	..	..	..	—46	..	—46
9. Total direct expenditure charged to Indian grant (excluding expenditure in England)..	14,56,874	3,87,087	18,43,961	12,99,039	3,41,709	16,40,748	13,68,458	3,54,466	17,22,924	14,61.189	3,70,521	18,31,710
Deduct amount treated as Capital Expenditure and Loss or Gain by Exchange	551	1,338	1,889	2,361	7,724	10,085	1,898	3,563	5,461	1,967	16,498	18,465
10. Net direct expenditure ..	14,56,323	3,85,749	18,42,072	12,96,678	3,33,985	16,30,663	13,66,560	3,50,903	17,17,463	14,59,222	3,54,023	18,13,245
11. Expenditure in England [Item 5 (b)]	11,122	..	11,122	157	356	513	4,901	357	5,258	256	176	432
12. Leave salary and overseas pay paid in England ..	83,297	29,468	1,12,765	44,430	19,628	64,058	63,746	10,786	74,532	38,095	21,713	59,808
13. Pensionary charges ..	58,457	10,471	68,928	55,451	10,438	65,889	56,564	10,598	67,162	57,682	10,740	68,422
14. Government contribution to Provident Fund	67,634	23,103	90,737	45,767	15,485	61,252	43,391	13,957	57,348	44,938	12,781	57,719
15. Interest on capital outlay ..	28,674	37,916	66,590	28,165	37,633	65,798	27,840	37,075	64,915	27,742	37,285	65,027
16. Depreciation charges ..	14,978	13,126	28,104	14,342	12,569	26,911	14,153	12,301	26,454	13,792	11,750	25,542
17. Stationery and Printing ..	31,204	7,067	38,271	29,657	7,930	37,587	35,759	7,946	43,705	36,228	8,053	44,281
18. Cost of Audit and Accounts	2,06,627	22,958	2,29,585	1,77,581	19,731	1,97,312	1,85,517	20,613	2,06,130	2,02,212	22,468	2,24,680
19. Expenditure on retrenched personnel	1,402	123	1,525	16,878	1,162	18,040	6,649	59	6,708	4,729	..	4,729
*20. Services rendered by Non-Commercial Branches to Commercial Branches and *vice versa*	(a) 73,874	(a) 10,991	..	(a) 70,659	(a) 6,086	..	(a) 86,105	(a) 6,294	..	(a) 97,295	(a) 6,558	..
Total Expenditure ..	20,33,592	5,40,972	24,89,699	17,79,765	4,65,003	21,68,023	18,91,185	4,70,889	22,69,675	19,82,191	4,85,547	23,63,885
Deficit	7,45,735	3,59,594	11,05,329	8,44,966	3,06,771	11,51,737	7,65,780	3,06,404	10,72,184	5,52,816	2,87,163	8,39,979

*(a) As these figures represent adjustments within the Department, they have not been shown in the column representing totals for the Department as a whole.

Certified that audit has obtained all the information and explanations required, that the statement of affairs has been drawn up according to the existing orders and presents a correct view of the affairs of the Indian Stores Department according to the best of my knowledge and belief and the information supplied to me from time to time.

V. D. DANTYAGI,

Audit Officer, Indian Stores Department.

APPENDIX XIX.

Statement of the work done by the Indian Stores Department, year by year, since its constitution.

(*Vide* paragraphs 2, 3 and 7 of the Report.)

Year.	Value of textile stores and leather goods purchased.	Value of Engineering and miscellaneous stores purchased.	Total value of stores purchased.	Amount of stores inspected and charged on value.	Tonnage of stores inspected and charged on weight.	Tests and analyses carried out.	Total fees earned (Net).
1	2	3	4	5	6	7	8
	Rs	Rs.	Rs.	Rs.	Tons.	Nos.	Rs.
1921-22 (January-March 1922)	59,27,330	..	59,27,330	..	..	..	59,273
1922-23 ..	1,64,78,305	..	1,64,78,305	1,42,79,333	107,648	5,744	4,42,168
1923-24 ..	1,17,08,745	50,15,656	1,67,24,401	2,21,45,403	171,797	7,364	6,20,748
1924-25 ..	1,33,26,953	1,25,84,188	2,59,11,141	2,13,73,382	251,760	9,989	8,57,941
1925-26 ..	1,18,81,516	1,47,86,417	2,66,67,933	3,98,78,885	292,550	9,932	11,08,043
1926-27 ..	1,62,86,293	2,35,95,952	3,98,82,245	5,19,88,643	336,368	12,354	15,01,075
1927-28 ..	1,18,82,009	2,54,22,663	3,73,04,672	5,71,10,815	331,628	13,065	15,72,158
1928-29 ..	1,16,24,973	2,44,23,101	3,60,48,074	5,42,33,106	218,764	12,953	12,92,698
1929-30 ..	1,13,36,292	3,15,89,409	4,29,25,701	7,47,99,137	343,109	14,273	17,33,302
1930-31 ..	98,37,157	2,78,45,539	3,76,82,696	6,61,19,542	328,020	16,256	15,59,697
1931-32 ..	1,06,14,978	2,53,85,028	3,60,00,006	4,84,21,867	310,504	14,401	13,20,889
1932-33 ..	79,12,155	2,51,78,748	3,30,90,903	3,54,07,609	156,203	11,512	9,64,924
1933-34 ..	85,55,361	2,74,38,774	3,59,94,135	4,46,65,505	254,833	15,499	11,85,792
1934-35 ..	95,85,357	3,80,50,894	4,76,36,251	5,36,35,655	323,862	16,597	15,18,463
Total from 1st January 1922 to 31st March 1935 ..	15,69,57,424	28,13,16,369	43,82,73,793	58,40,58,882	3,427,046	159,939	1,57,37,171

INDEX.

Paragraphs.

M38ISD—485—26-9-35—GIPS